CP Papers on Scheduling

Helmut Simonis and Cemalettin Öztürk ${\it March~8,~2024}$

- 1 Introduction
- 2 Conference Paper List

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
AalianPG23 AalianPG23	Y. Aalian, G. Pesant, M. Gamache	Optimization of Short-Term Underground Mine Planning Using Constraint Programming	Yes	[1]	2023	CP 2023	16
Bit-Monnot23 Bit- Monnot23	A. Bit-Monnot	Enhancing Hybrid CP-SAT Search for Disjunctive Scheduling	Yes	[55]	2023	ECAI 2023	8
EfthymiouY23 EfthymiouY23	N. Efthymiou, N. Yorke-Smith	Predicting the Optimal Period for Cyclic Hoist Scheduling Problems	Yes	[106]	2023	CPAIOR 2023	16
JuvinHHL23 Juvin- HHL23	C. Juvin, E. Hebrard, L. Houssin, P. Lopez	An Efficient Constraint Programming Approach to Preemptive Job Shop Scheduling	Yes	[188]	2023	CP 2023	16
JuvinHL23 JuvinHL23	C. Juvin, L. Houssin, P. Lopez	Constraint Programming for the Robust Two-Machine Flow-Shop Scheduling Problem with Budgeted Uncer- tainty	Yes	[189]	2023	CPAIOR 2023	16
KameugneFND23 KameugneFND23	R. Kameugne, Sévérine Betmbe Fetgo, T. Noulamo, Clémentin Tayou Djamégni	Horizontally Elastic Edge Finder Rule for Cumulative Constraint Based on Slack and Density	Yes	[193]	2023	CP 2023	17
KimCMLLP23 KimCM- LLP23	D. Kim, Y. Choi, K. Moon, M. Lee, K. Lee, Michael L. Pinedo	Iterated Greedy Constraint Programming for Scheduling Steelmaking Continuous Casting	Yes	[202]	2023	CPAIOR 2023	16
Mehdizadeh-Somarin23 Mehdizadeh-Somarin23	Z. Mehdizadeh-Somarin, R. Tavakkoli- Moghaddam, M. Rohaninejad, Z. Hanzálek, Behdin Vahedi Nouri	A Constraint Programming Model for a Reconfigurable Job Shop Scheduling Problem with Machine Availability	Yes	[260]	2023	APMS 2023	14
PerezGSL23 PerezGSL23	G. Perez, G. Glorian, W. Suijlen, A. Lallouet	A Constraint Programming Model for Scheduling the Unloading of Trains in Ports	Yes	[299]	2023	ICTAI 2023	7
PovedaAA23 PovedaAA23	G. Povéda, N. Álvarez, C. Artigues	Partially Preemptive Multi Skill/Mode Resource- Constrained Project Scheduling with Generalized Precedence Relations and Calendars	Yes	[309]	2023	CP 2023	21
SquillaciPR23 Squil- laciPR23	S. Squillaci, C. Pralet, S. Roussel	Scheduling Complex Observation Requests for a Constellation of Satellites: Large Neighborhood Search Approaches	Yes	[346]	2023	CPAIOR 2023	17
TardivoDFMP23 TardivoDFMP23	F. Tardivo, A. Dovier, A. Formisano, L. Michel, E. Pontelli	Constraint Propagation on GPU: A Case Study for the Cumulative Constraint	Yes	[354]	2023	CPAIOR 2023	18
TasselGS23 TasselGS23	P. Tassel, M. Gebser, K. Schekotihin	An End-to-End Reinforcement Learning Approach for Job-Shop Scheduling Problems Based on Constraint Pro- gramming	Yes	[355]	2023	ICAPS 2023	9
WangB23 WangB23	R. Wang, N. Barnier	Dynamic All-Different and Maximal Cliques Constraints for Fixed Job Scheduling	Yes	[391]	2023	ICTAI 2023	8
YuraszeckMC23 YuraszeckMC23	F. Yuraszeck, G. Mejía, D. Canut-de-Bon	A competitive constraint programming approach for the group shop scheduling problem	Yes	[405]	2023	ANT 2023	6
ArmstrongGOS22 ArmstrongGOS22	E. Armstrong, M. Garraffa, B. O'Sullivan, H. Simonis	A Two-Phase Hybrid Approach for the Hybrid Flexible Flowshop with Transportation Times	Yes	[14]	2022	CPAIOR 2022	13
${f BoudreaultSLQ22} \ {f BoudreaultSLQ22}$	R. Boudreault, V. Simard, D. Lafond, C. Quimper	A Constraint Programming Approach to Ship Refit Project Scheduling	Yes	[67]	2022	CP 2022	16
GeitzGSSW22 GeitzGSSW22	M. Geitz, C. Grozea, W. Steigerwald, R. Stöhr, A. Wolf	Solving the Extended Job Shop Scheduling Problem with AGVs - Classical and Quantum Approaches	Yes	[137]	2022	CPAIOR 2022	18
LiFJZLL22 LiFJZLL22	X. Li, J. Fu, Z. Jia, Z. Zhao, S. Li, S. Liu	Constraint Programming for a Novel Integrated Optimization of Blocking Job Shop Scheduling and Variable-Speed Transfer Robot Assignment	Yes	[231]	2022	ICNSC 2022	6
OuelletQ22 OuelletQ22 OujanaAYB22 Ou- janaAYB22	Y. Ouellet, C. Quimper S. Oujana, L. Amodeo, F. Yalaoui, D. Brodart	A MinCumulative Resource Constraint Solving a realistic hybrid and flexible flow shop scheduling problem through constraint programming: industrial case in a packaging company	Yes Yes	[291] [292]	2022 2022	CPAIOR 2022 CoDIT 2022	17 6
PopovicCGNC22 PopovicCGNC22	L. Popovic, A. Côté, M. Gaha, F. Nguewouo, Q. Cappart	Scheduling the Equipment Maintenance of an Electric Power Transmission Network Using Constraint Program- ming	Yes	[307]	2022	CP 2022	15
Teppan22 Teppan22	Erich Christian Teppan	Types of Flexible Job Shop Scheduling: A Constraint Programming Experiment	No	[358]	2022	ICAART 2022	8
TouatBT22 TouatBT22	M. Touat, B. Benhamou, Fatima Benbouzid-Si Tayeb	A Constraint Programming Model for the Scheduling Problem with Flexible Maintenance under Human Re- source Constraints	No	[365]	2022	ICAART 2022	8

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
WinterMMW22 Winter- MMW22	F. Winter, S. Meiswinkel, N. Musliu, D. Walkiewicz	Modeling and Solving Parallel Machine Scheduling with Contamination Constraints in the Agricultural Industry	Yes	[396]	2022	CP 2022	18
ZhangJZL22 ZhangJZL22	H. Zhang, Y. Ji, Z. Zhao, S. Liu	Constraint Programming for Modeling and Solving a Hybrid Flow Shop Scheduling Problem	Yes	[410]	2022	ICNSC 2022	6
AntuoriHHEN21 AntuoriHHEN21	V. Antuori, E. Hebrard, M. Huguet, S. Essodaigui, A. Nguyen	Combining Monte Carlo Tree Search and Depth First Search Methods for a Car Manufacturing Workshop Scheduling Problem	Yes	[11]	2021	CP 2021	16
ArmstrongGOS21 ArmstrongGOS21	E. Armstrong, M. Garraffa, B. O'Sullivan, H. Simonis	The Hybrid Flexible Flowshop with Transportation Times	Yes	[13]	2021	CP 2021	18
Astrand0F21 Astrand0F21	M. Åstrand, M. Johansson, Hamid Reza Feyzmahdavian	Short-Term Scheduling of Production Fleets in Underground Mines Using CP-Based LNS	Yes	[20]	2021	CPAIOR 2021	18
BenderWS21 BenderWS21	T. Bender, D. Wittwer, T. Schmidt	Applying Constraint Programming to the Multi-mode Scheduling Problem in Harvest Logistics	Yes	[47]	2021	ICCL 2021	16
GeibingerKKMMW21 GeibingerKKMMW21	T. Geibinger, L. Kletzander, M. Krainz, F. Mischek, N. Musliu, F. Winter	Physician Scheduling During a Pandemic	Yes	[133]	2021	CPAIOR 2021	10
GeibingerMM21 GeibingerMM21	T. Geibinger, F. Mischek, N. Musliu	Constraint Logic Programming for Real-World Test Laboratory Scheduling	Yes	[136]	2021	AAAI 2021	9
HanenKP21 HanenKP21	C. Hanen, Alix Munier Kordon, T. Pedersen	Two Deadline Reduction Algorithms for Scheduling Dependent Tasks on Parallel Processors	Yes	[159]	2021	CPAIOR 2021	17
HillTV21 HillTV21	A. Hill, J. Ticktin, Thomas W. M. Vossen	A Computational Study of Constraint Programming Approaches for Resource-Constrained Project Scheduling with Autonomous Learning Effects	Yes	[175]	2021	CPAIOR 2021	19
KlankeBYE21 Klanke- BYE21	C. Klanke, Dominik R. Bleidorn, V. Yfantis, S. Engell	Combining Constraint Programming and Temporal De- composition Approaches - Scheduling of an Industrial For- mulation Plant	Yes	[203]	2021	CPAIOR 2021	16
KovacsTKSG21 KovacsTKSG21	B. Kovács, P. Tassel, W. Kohlenbrein, P. Schrott-Kostwein, M. Gebser	Utilizing Constraint Optimization for Industrial Machine Workload Balancing	Yes	[215]	2021	CP 2021	17
LacknerMMWW21 LacknerMMWW21	M. Lackner, C. Mrkvicka, N. Musliu, D. Walkiewicz, F. Winter	Minimizing Cumulative Batch Processing Time for an Industrial Oven Scheduling Problem	Yes	[223]	2021	CP 2021	18
BarzegaranZP20 BarzegaranZP20	M. Barzegaran, B. Zarrin, P. Pop	Quality-Of-Control-Aware Scheduling of Communication in TSN-Based Fog Computing Platforms Using Con- straint Programming	Yes	[36]	2020	Fog-IoT 2020	9
GodetLHS20 GodetLHS20	A. Godet, X. Lorca, E. Hebrard, G. Simonin	Using Approximation within Constraint Programming to Solve the Parallel Machine Scheduling Problem with Ad- ditional Unit Resources	Yes	[143]	2020	AAAI 2020	8
GroleazNS20 GroleazNS20	L. Groleaz, Samba Ndojh Ndiaye, C. Solnon	Solving the Group Cumulative Scheduling Problem with CPO and ACO	Yes	[154]	2020	CP 2020	17
GroleazNS20a GroleazNS20a	L. Groleaz, Samba Ndojh Ndiaye, C. Solnon	ACO with automatic parameter selection for a scheduling problem with a group cumulative constraint	No	[153]	2020	GECCO 2020	9
Mercier-AubinGQ20 Mercier-AubinGQ20	A. Mercier-Aubin, J. Gaudreault, C. Quimper	Leveraging Constraint Scheduling: A Case Study to the Textile Industry	Yes	[263]	2020	CPAIOR 2020	13
NattafM20 NattafM20	M. Nattaf, A. Malapert	Filtering Rules for Flow Time Minimization in a Parallel Machine Scheduling Problem	Yes	[278]	2020	CP 2020	16
TangB20 TangB20	Tanya Y. Tang, J. Christopher Beck	CP and Hybrid Models for Two-Stage Batching and Scheduling	Yes	[352]	2020	CPAIOR 2020	16
WangB20 WangB20	R. Wang, N. Barnier	Global Propagation of Transition Cost for Fixed Job Scheduling	Yes	[390]	2020	ECAI 2020	8
WessenCS20 WessenCS20	J. Wessén, M. Carlsson, C. Schulte	Scheduling of Dual-Arm Multi-tool Assembly Robots and Workspace Layout Optimization	Yes	[394]	2020	CPAIOR 2020	10
BadicaBIL19 Badica- BIL19	A. Badica, C. Badica, M. Ivanovic, D. Logofatu	Exploring the Space of Block Structured Scheduling Processes Using Constraint Logic Programming	No	[24]	2019	IDC 2019	11
BehrensLM19 BehrensLM19	Jan Kristof Behrens, R. Lange, M. Mansouri	A Constraint Programming Approach to Simultaneous Task Allocation and Motion Scheduling for Industrial Dual-Arm Manipulation Tasks	Yes	[40]	2019	ICRA 2019	7
BogaerdtW19 BogaerdtW19	Pim van den Bogaerdt, Mathijs de Weerdt	Lower Bounds for Uniform Machine Scheduling Using Decision Diagrams	Yes	[371]	2019	CPAIOR 2019	16

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
ColT19 ColT19	Giacomo Da Col, Erich Christian Teppan	Industrial Size Job Shop Scheduling Tackled by Present Day CP Solvers	Yes	[83]	2019	CP 2019	17
FrimodigS19 FrimodigS19	S. Frimodig, C. Schulte	Models for Radiation Therapy Patient Scheduling	Yes	[121]	2019	CP 2019	17
FrohnerTR19 FrohnerTR19	N. Frohner, S. Teuschl, Günther R. Raidl	Casual Employee Scheduling with Constraint Programming and Metaheuristics	Yes	[122]	2019	EUROCAST 2019	9
GalleguillosKSB19 GalleguillosKSB19	C. Galleguillos, Z. Kiziltan, A. Sîrbu, Özalp Babaoglu	Constraint Programming-Based Job Dispatching for Modern HPC Applications	Yes	[124]	2019	CP 2019	18
GeibingerMM19 GeibingerMM19	T. Geibinger, F. Mischek, N. Musliu	Investigating Constraint Programming for Real World Industrial Test Laboratory Scheduling	Yes	[135]	2019	CPAIOR 2019	16
LiuLH19 LiuLH19	K. Liu, S. Löffler, P. Hofstedt	Solving the Talent Scheduling Problem by Parallel Constraint Programming	Yes	[238]	2019	AIAI 2019	9
MalapertN19 MalapertN19	A. Malapert, M. Nattaf	A New CP-Approach for a Parallel Machine Scheduling Problem with Time Constraints on Machine Qualifica- tions	Yes	[254]	2019	CPAIOR 2019	17
MurinR19 MurinR19	S. Murín, H. Rudová	Scheduling of Mobile Robots Using Constraint Programming	Yes	[273]	2019	CP 2019	16
ParkUJR19 ParkUJR19	H. Park, J. Um, J. Jung, M. Ruskowski	Developing a Production Scheduling System for Modular Factory Using Constraint Programming	Yes	[297]	2019	RAAD 2019	8
Tom19 Tom19	M. Tom	Fuzzy Multi-Constraint Programming Model for Weekly Meals Scheduling	Yes	[363]	2019	FUZZ-IEEE 2019	6
YangSS19 YangSS19 ArbaouiY18 Ar-	M. Yang, A. Schutt, Peter J. Stuckey T. Arbaoui, F. Yalaoui	Time Table Edge Finding with Energy Variables Solving the Unrelated Parallel Machine Scheduling Prob-	Yes Yes	[402] [12]	2019 2018	CPAIOR 2019 ACHDS 2018	10 10
baouiY18	1. Albaoui, F. Talaoui	lem with Additional Resources Using Constraint Programming	105	[12]	2018	ACIIDS 2016	10
AstrandJZ18 AstrandJZ18	M. Åstrand, M. Johansson, A. Zanarini	Fleet Scheduling in Underground Mines Using Constraint Programming	Yes	[21]	2018	CPAIOR 2018	9
BenediktSMVH18 BenediktSMVH18	O. Benedikt, P. Sucha, I. Módos, M. Vlk, Z. Hanzálek	Energy-Aware Production Scheduling with Power-Saving Modes	Yes	[49]	2018	CPAIOR 2018	10
DemirovicS18 DemirovicS18	E. Demirovic, Peter J. Stuckey	Constraint Programming for High School Timetabling: A Scheduling-Based Model with Hot Starts	Yes	[95]	2018	CPAIOR 2018	18
He0GLW18 He0GLW18	S. He, M. Wallace, G. Gange, A. Liebman, C. Wilson	A Fast and Scalable Algorithm for Scheduling Large Numbers of Devices Under Real-Time Pricing	Yes	[161]	2018	CP 2018	18
HoYCLLCLC18 HoY- CLLCLC18	T. Ho, J. Yao, Y. Chang, F. Lai, J. Lai, S. Chu, W. Liao, H. Chiu	A Platform for Dynamic Optimal Nurse Scheduling Based on Integer Linear Programming along with Multiple Cri- teria Constraints	No	[176]	2018	AICCC 2018	6
KameugneFGOQ18 KameugneFGOQ18	R. Kameugne, Sévérine Betmbe Fetgo, V. Gingras, Y. Ouellet, C. Quimper	Horizontally Elastic Not-First/Not-Last Filtering Algorithm for Cumulative Resource Constraint	Yes	[192]	2018	CPAIOR 2018	17
Laborie18a Laborie18a	P. Laborie	An Update on the Comparison of MIP, CP and Hybrid Approaches for Mixed Resource Allocation and Schedul- ing	Yes	[221]	2018	CPAIOR 2018	9
NishikawaSTT18 NishikawaSTT18	H. Nishikawa, K. Shimada, I. Taniguchi, H. Tomiyama	Scheduling of Malleable Fork-Join Tasks with Constraint Programming	Yes	[280]	2018	CANDAR 2018	6
NishikawaSTT18a NishikawaSTT18a	H. Nishikawa, K. Shimada, I. Taniguchi, H. Tomiyama	Scheduling of Malleable Tasks Based on Constraint Programming	Yes	[281]	2018	TENCON 2018	6
OuelletQ18 OuelletQ18	Y. Ouellet, C. Quimper	A O(n \log ^2 n) Checker and O(n^2 \log n) Filtering Algorithm for the Energetic Reasoning	Yes	[290]	2018	CPAIOR 2018	18
RiahiNS018 RiahiNS018	V. Riahi, M. A. Hakim Newton, K. Su, A. Sattar	Local Search for Flowshops with Setup Times and Blocking Constraints	No	[319]	2018	ICAPS 2018	9
Tesch18 Tesch18	A. Tesch	Improving Energetic Propagations for Cumulative Scheduling	Yes	[360]	2018	CP 2018	17
BofillCSV17 BofillCSV17	M. Bofill, J. Coll, J. Suy, M. Villaret	An Efficient SMT Approach to Solve MRCPSP/max Instances with Tight Constraints on Resources	Yes	[57]	2017	CP 2017	9
CappartS17 CappartS17	Q. Cappart, P. Schaus	Rescheduling Railway Traffic on Real Time Situations Using Time-Interval Variables	Yes	[73]	2017	CPAIOR 2017	16

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
GelainPRVW17 Gelain- PRVW17	M. Gelain, Maria Silvia Pini, F. Rossi, Kristen Brent Venable, T. Walsh	A Local Search Approach for Incomplete Soft Constraint Problems: Experimental Results on Meeting Scheduling Problems	Yes	[138]	2017	CPAIOR 2017	16
GoldwaserS17 Gold- waserS17	A. Goldwaser, A. Schutt	Optimal Torpedo Scheduling	Yes	[146]	2017	CP 2017	16
Hooker17 Hooker17	John N. Hooker	Job Sequencing Bounds from Decision Diagrams	Yes	[181]	2017	CP 2017	14
KletzanderM17 Kletzan- derM17	L. Kletzander, N. Musliu	A Multi-stage Simulated Annealing Algorithm for the Torpedo Scheduling Problem	Yes	[204]	2017	CPAIOR 2017	15
LiuCGM17 LiuCGM17	T. Liu, Roberto Di Cosmo, M. Gabbrielli, J. Mauro	NightSplitter: A Scheduling Tool to Optimize (Sub)group Activities	Yes	[239]	2017	CP 2017	17
Madi-WambaLOBM17 Madi-WambaLOBM17	G. Madi-Wamba, Y. Li, A. Orgerie, N. Beldiceanu, J. Menaud	Green Energy Aware Scheduling Problem in Virtualized Datacenters	Yes	[252]	2017	ICPADS 2017	8
MossigeGSMC17 MossigeGSMC17	M. Mossige, A. Gotlieb, H. Spieker, H. Meling, M. Carlsson	Time-Aware Test Case Execution Scheduling for Cyber-Physical Systems	Yes	[269]	2017	CP 2017	18
Pralet17 Pralet17	C. Pralet	An Incomplete Constraint-Based System for Scheduling with Renewable Resources	Yes	[310]	2017	CP 2017	19
YoungFS17 YoungFS17	Kenneth D. Young, T. Feydy, A. Schutt	Constraint Programming Applied to the Multi-Skill Project Scheduling Problem	Yes	[403]	2017	CP 2017	10
BonfiettiZLM16 Bonfiet- tiZLM16	A. Bonfietti, A. Zanarini, M. Lombardi, M. Milano	The Multirate Resource Constraint	Yes	[64]	2016	CP 2016	17
BoothNB16 BoothNB16	Kyle E. C. Booth, G. Nejat, J. Christopher Beck	A Constraint Programming Approach to Multi-Robot Task Allocation and Scheduling in Retirement Homes	Yes	[65]	2016	CP 2016	17
CauwelaertDMS16 CauwelaertDMS16	Sascha Van Cauwelaert, C. Dejemeppe, J. Monette, P. Schaus	Efficient Filtering for the Unary Resource with Family-Based Transition Times	Yes	[76]	2016	CP 2016	16
FontaineMH16 FontaineMH16	D. Fontaine, Laurent D. Michel, Pascal Van Hentenryck	Parallel Composition of Scheduling Solvers	Yes	[117]	2016	CPAIOR 2016	11
GilesH16 GilesH16	K. Giles, Willem-Jan van Hoeve	Solving a Supply-Delivery Scheduling Problem with Constraint Programming	Yes	[140]	2016	CP 2016	16
GingrasQ16 GingrasQ16	V. Gingras, C. Quimper	Generalizing the Edge-Finder Rule for the Cumulative Constraint	No	[141]	2016	IJCAI 2016	7
HechingH16 HechingH16	Aliza R. Heching, John N. Hooker	Scheduling Home Hospice Care with Logic-Based Benders Decomposition	Yes	[163]	2016	CPAIOR 2016	11
LimHTB16 LimHTB16	B. Lim, Hassan L. Hijazi, S. Thiébaux, Menkes van den Briel	Online HVAC-Aware Occupancy Scheduling with Adaptive Temperature Control	Yes	[234]	2016	CP 2016	18
Madi-WambaB16 Madi- WambaB16	G. Madi-Wamba, N. Beldiceanu	The TaskIntersection Constraint	Yes	[251]	2016	CPAIOR 2016	16
SchuttS16 SchuttS16	A. Schutt, Peter J. Stuckey	Explaining Producer/Consumer Constraints	Yes	[333]	2016	CP 2016	17
SzerediS16 SzerediS16	R. Szeredi, A. Schutt	Modelling and Solving Multi-mode Resource-Constrained Project Scheduling	Yes	[351]	2016	CP 2016	10
Tesch16 Tesch16	A. Tesch	A Nearly Exact Propagation Algorithm for Energetic Reasoning in \mathcal O(n^2 \log n)	Yes	[359]	2016	CP 2016	27
BofillGSV15 Bofill- GSV15	M. Bofill, M. Garcia, J. Suy, M. Villaret	MaxSAT-Based Scheduling of B2B Meetings	Yes	[59]	2015	CPAIOR 2015	9
BurtLPS15 BurtLPS15	Christina N. Burt, N. Lipovetzky, Adrian R. Pearce, Peter J. Stuckey	Scheduling with Fixed Maintenance, Shared Resources and Nonlinear Feedrate Constraints: A Mine Planning Case Study	Yes	[70]	2015	CPAIOR 2015	17
DejemeppeCS15 DejemeppeCS15	C. Dejemeppe, Sascha Van Cauwelaert, P. Schaus	The Unary Resource with Transition Times	Yes	[92]	2015	CP 2015	16
EvenSH15 EvenSH15	C. Even, A. Schutt, Pascal Van Hentenryck	A Constraint Programming Approach for Non-preemptive Evacuation Scheduling	Yes	[111]	2015	CP 2015	18
GayHLS15 GayHLS15	S. Gay, R. Hartert, C. Lecoutre, P. Schaus	Conflict Ordering Search for Scheduling Problems	Yes	[128]	2015	CP 2015	9
GayHS15 GayHS15	S. Gay, R. Hartert, P. Schaus	Simple and Scalable Time-Table Filtering for the Cumulative Constraint	Yes	[129]	2015	CP 2015	9
KreterSS15 KreterSS15	S. Kreter, A. Schutt, Peter J. Stuckey	Modeling and Solving Project Scheduling with Calendars	Yes	[216]	2015	CP 2015	17
LimBTBB15 LimBTBB15	B. Lim, Menkes van den Briel, S. Thiébaux, R. Bent, S. Backhaus	Large Neighborhood Search for Energy Aware Meeting Scheduling in Smart Buildings	Yes	[235]	2015	CPAIOR 2015	15

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
LombardiBM15 Lom- bardiBM15	M. Lombardi, A. Bonfietti, M. Milano	Deterministic Estimation of the Expected Makespan of a POS Under Duration Uncertainty	Yes	[241]	2015	CP 2015	16
MelgarejoLS15 Melgare- joLS15	P. Aguiar-Melgarejo, P. Laborie, C. Solnon	A Time-Dependent No-Overlap Constraint: Application to Urban Delivery Problems	Yes	[6]	2015	CPAIOR 2015	17
MurphyMB15 MurphyMB15	Seán Óg Murphy, O. Manzano, Kenneth N. Brown	Design and Evaluation of a Constraint-Based Energy Saving and Scheduling Recommender System	Yes	[274]	2015	CP 2015	17
PesantRR15 PesantRR15	G. Pesant, G. Rix, L. Rousseau	A Comparative Study of MIP and CP Formulations for the B2B Scheduling Optimization Problem	Yes	[301]	2015	CPAIOR 2015	16
PraletLJ15 PraletLJ15	C. Pralet, S. Lemai-Chenevier, J. Jaubert	Scheduling Running Modes of Satellite Instruments Using Constraint-Based Local Search	Yes	[311]	2015	CP 2015	16
SialaAH15 SialaAH15	M. Siala, C. Artigues, E. Hebrard	Two Clause Learning Approaches for Disjunctive Scheduling	Yes	[340]	2015	CP 2015	10
VilimLS15 VilimLS15	P. Vilím, P. Laborie, P. Shaw	Failure-Directed Search for Constraint-Based Scheduling	Yes	[385]	2015	CPAIOR 2015	17
ZhouGL15 ZhouGL15	J. Zhou, Y. Guo, G. Li	On complex hybrid flexible flowshop scheduling problems based on constraint programming	Yes	[416]	2015	FSKD 2015	5
cpaior-GayHS15 cpaior- GayHS15	S. Gay, R. Hartert, P. Schaus	Time-Table Disjunctive Reasoning for the Cumulative Constraint	Yes	[130]	2015	CPAIOR 2015	16
AlesioNBG14 AlesioNBG14	Stefano Di Alesio, S. Nejati, Lionel C. Briand, A. Gotlieb	Worst-Case Scheduling of Software Tasks - A Constraint Optimization Model to Support Performance Testing	Yes	[99]	2014	CP 2014	18
BartoliniBBLM14 Bar- toliniBBLM14	A. Bartolini, A. Borghesi, T. Bridi, M. Lombardi, M. Milano	Proactive Workload Dispatching on the EURORA Supercomputer	Yes	[35]	2014	CP 2014	16
BessiereHMQW14 BessiereHMQW14	C. Bessiere, E. Hebrard, M. Ménard, C. Quimper, T. Walsh	Buffered Resource Constraint: Algorithms and Complexity	Yes	[53]	2014	CPAIOR 2014	16
BofillEGPSV14 Bofil- lEGPSV14	M. Bofill, J. Espasa, M. Garcia, M. Palahí, J. Suy, M. Villaret	Scheduling B2B Meetings	Yes	[58]	2014	CP 2014	16
BonfiettiLM14 BonfiettiLM14	A. Bonfietti, M. Lombardi, M. Milano	Disregarding Duration Uncertainty in Partial Order Schedules? Yes, We Can!	Yes	[63]	2014	CPAIOR 2014	16
DejemeppeD14 DejemeppeD14	C. Dejemeppe, Y. Deville	Continuously Degrading Resource and Interval Dependent Activity Durations in Nuclear Medicine Patient Scheduling	Yes	[93]	2014	CPAIOR 2014	9
DerrienP14 DerrienP14	A. Derrien, T. Petit	A New Characterization of Relevant Intervals for Energetic Reasoning	Yes	[97]	2014	CP 2014	9
DerrienPZ14 DerrienPZ14	A. Derrien, T. Petit, S. Zampelli	A Declarative Paradigm for Robust Cumulative Scheduling	Yes	[98]	2014	CP 2014	9
DoulabiRP14 Doula- biRP14	Seyed Hossein Hashemi Doulabi, L. Rousseau, G. Pesant	A Constraint Programming-Based Column Generation Approach for Operating Room Planning and Scheduling	Yes	[103]	2014	CPAIOR 2014	9
FriedrichFMRSST14 FriedrichFMRSST14	G. Friedrich, M. Frühstück, V. Mersheeva, A. Ryabokon, M. Sander, A. Starzacher, E. Teppan	Representing Production Scheduling with Constraint Answer Set Programming	No	[120]	2014	GOR 2014	7
GaySS14 GaySS14	S. Gay, P. Schaus, Vivian De Smedt	Continuous Casting Scheduling with Constraint Programming	Yes	[131]	2014	CP 2014	15
HoundjiSWD14 Hound- jiSWD14	Vinasétan Ratheil Houndji, P. Schaus, Laurence A. Wolsey, Y. Deville	The StockingCost Constraint	Yes	[183]	2014	CP 2014	16
KoschB14 KoschB14	S. Kosch, J. Christopher Beck	A New MIP Model for Parallel-Batch Scheduling with Non-identical Job Sizes	Yes	[208]	2014	CPAIOR 2014	16
CireCH13 CireCH13	André A. Ciré, E. Coban, John N. Hooker	Mixed Integer Programming vs. Logic-Based Benders De- composition for Planning and Scheduling	Yes	[80]	2013	CPAIOR 2013	7
GuSS13 GuSS13	H. Gu, A. Schutt, Peter J. Stuckey	A Lagrangian Relaxation Based Forward-Backward Improvement Heuristic for Maximising the Net Present Value of Resource-Constrained Projects	Yes	[156]	2013	CPAIOR 2013	7
HeinzKB13 HeinzKB13	S. Heinz, W. Ku, J. Christopher Beck	Recent Improvements Using Constraint Integer Programming for Resource Allocation and Scheduling	Yes	[165]	2013	CPAIOR 2013	16
KelarevaTK13 KelarevaTK13	E. Kelareva, K. Tierney, P. Kilby	CP Methods for Scheduling and Routing with Time- Dependent Task Costs	Yes	[197]	2013	CPAIOR 2013	17
LetortCB13 LetortCB13	A. Letort, M. Carlsson, N. Beldiceanu	A Synchronized Sweep Algorithm for the k -dimensional cumulative Constraint	Yes	[229]	2013	CPAIOR 2013	16

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
OuelletQ13 OuelletQ13	P. Ouellet, C. Quimper	Time-Table Extended-Edge-Finding for the Cumulative Constraint	Yes	[289]	2013	CP 2013	16
SchuttFS13 SchuttFS13 cpaior-SchuttFS13 cpaior-SchuttFS13	A. Schutt, T. Feydy, Peter J. Stuckey A. Schutt, T. Feydy, Peter J. Stuckey	Scheduling Optional Tasks with Explanation Explaining Time-Table-Edge-Finding Propagation for the Cumulative Resource Constraint	Yes Yes	[330] [329]	2013 2013	CP 2013 CPAIOR 2013	17 17
BillautHL12 Bil- lautHL12	J. Billaut, E. Hebrard, P. Lopez	Complete Characterization of Near-Optimal Sequences for the Two-Machine Flow Shop Scheduling Problem	Yes	[54]	2012	CPAIOR 2012	15
BonfiettiLBM12 BonfiettiLBM12	A. Bonfietti, M. Lombardi, L. Benini, M. Milano	Global Cyclic Cumulative Constraint	Yes	[62]	2012	CPAIOR 2012	16
HeinzB12 HeinzB12	S. Heinz, J. Christopher Beck	Reconsidering Mixed Integer Programming and MIP- Based Hybrids for Scheduling	Yes	[164]	2012	CPAIOR 2012	17
IfrimOS12 IfrimOS12 LetortBC12 LetortBC12	G. Ifrim, B. O'Sullivan, H. Simonis A. Letort, N. Beldiceanu, M. Carlsson	Properties of Energy-Price Forecasts for Scheduling A Scalable Sweep Algorithm for the cumulative Con-	Yes Yes	[185] [228]	$2012 \\ 2012$	CP 2012 CP 2012	16 16
RendlPHPR12	A. Rendl, M. Prandtstetter, G. Hiermann, J.	straint Hybrid Heuristics for Multimodal Homecare Scheduling	Yes	[318]	2012	CPAIOR 2012	17
RendlPHPR12 SchuttCSW12	Puchinger, Günther R. Raidl A. Schutt, G. Chu, Peter J. Stuckey, Mark G.	Maximising the Net Present Value for Resource-	Yes	[328]	2012	CPAIOR 2012	17
SchuttCSW12 SerraNM12 SerraNM12	Wallace T. Serra, G. Nishioka, Fernando J. M. Marcellino	Constrained Project Scheduling The Offshore Resources Scheduling Problem: Detailing a	Yes	[335]	2012	CP 2012	17
SimoninAHL12 Simoni-	G. Simonin, C. Artigues, E. Hebrard, P. Lopez	Constraint Programming Approach Scheduling Scientific Experiments on the Rosetta/Philae	Yes	[341]	2012	CP 2012	15
nAHL12 ZhangLS12 ZhangLS12	X. Zhang, Z. Lv, X. Song	Mission Model and Solution for Hot Strip Rolling Scheduling	Yes	[413]	2012	CIT 2012	4
BonfiettiLBM11 Bonfi-	A. Bonfietti, M. Lombardi, L. Benini, M. Milano	Problem Based on Constraint Programming Method A Constraint Based Approach to Cyclic RCPSP	Yes	[61]	2011	CP 2011	15
${ m ettiLBM11}$		••					
ChapadosJR11 ChapadosJR11	N. Chapados, M. Joliveau, L. Rousseau	Retail Store Workforce Scheduling by Expected Operating Income Maximization	Yes	[78]	2011	CPAIOR 2011	6
ClercqPBJ11 Clerc- qPBJ11	Alexis De Clercq, T. Petit, N. Beldiceanu, N. Jussien	Filtering Algorithms for Discrete Cumulative Problems with Overloads of Resource	Yes	[81]	2011	CP 2011	16
EdisO11 EdisO11	Emrah B. Edis, C. Oguz	Parallel Machine Scheduling with Additional Resources: A Lagrangian-Based Constraint Programming Approach	Yes	[105]	2011	CPAIOR 2011	7
GrimesH11 GrimesH11	D. Grimes, E. Hebrard	Models and Strategies for Variants of the Job Shop Scheduling Problem	Yes	[150]	2011	CP 2011	17
HeinzS11 HeinzS11	S. Heinz, J. Schulz	Explanations for the Cumulative Constraint: An Experimental Study	Yes	[167]	2011	SEA 2011	10
HermenierDL11 HermenierDL11	F. Hermenier, S. Demassey, X. Lorca	Bin Repacking Scheduling in Virtualized Datacenters	Yes	[174]	2011	CP 2011	15
KameugneFSN11 KameugneFSN11	R. Kameugne, Laure Pauline Fotso, Joseph D. Scott, Y. Ngo-Kateu	A Quadratic Edge-Finding Filtering Algorithm for Cumulative Resource Constraints	Yes	[194]	2011	CP 2011	15
LahimerLH11 LahimerLH11	A. Lahimer, P. Lopez, M. Haouari	Climbing Depth-Bounded Adjacent Discrepancy Search for Solving Hybrid Flow Shop Scheduling Problems with Multiprocessor Tasks	Yes	[225]	2011	CPAIOR 2011	14
LombardiBMB11 LombardiBMB11	M. Lombardi, A. Bonfietti, M. Milano, L. Benini	Precedence Constraint Posting for Cyclic Scheduling Problems	Yes	[242]	2011	CPAIOR 2011	17
Vilim11 Vilim11	P. Vilím	Timetable Edge Finding Filtering Algorithm for Discrete Cumulative Resources	Yes	[382]	2011	CPAIOR 2011	16
ZibranR11 ZibranR11	Minhaz F. Zibran, Chanchal K. Roy	Conflict-Aware Optimal Scheduling of Code Clone Refactoring: A Constraint Programming Approach	Yes	[418]	2011	ICPC 2011	4
ZibranR11a ZibranR11a	Minhaz F. Zibran, Chanchal K. Roy	A Constraint Programming Approach to Conflict-Aware Optimal Scheduling of Prioritized Code Clone Refactoring	Yes	[419]	2011	SCAM 2011	10
BertholdHLMS10 BertholdHLMS10	T. Berthold, S. Heinz, Marco E. Lübbecke, Rolf H. Möhring, J. Schulz	A Constraint Integer Programming Approach for Resource-Constrained Project Scheduling	Yes	[52]	2010	CPAIOR 2010	5
CobanH10 CobanH10	E. Coban, John N. Hooker	Single-Facility Scheduling over Long Time Horizons by Logic-Based Benders Decomposition	Yes	[82]	2010	CPAIOR 2010	5

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
Davenport10 Daven- port10	Andrew J. Davenport	Integrated Maintenance Scheduling for Semiconductor Manufacturing	Yes	[87]	2010	CPAIOR 2010	5
GrimesH10 GrimesH10	D. Grimes, E. Hebrard	Job Shop Scheduling with Setup Times and Maximal Time-Lags: A Simple Constraint Programming Approach	Yes	[149]	2010	CPAIOR 2010	15
LombardiM10 LombardiM10	M. Lombardi, M. Milano	Constraint Based Scheduling to Deal with Uncertain Durations and Self-Timed Execution		[244]	2010	CP 2010	15
MakMS10 MakMS10	K. Mak, J. Ma, W. Su	A constraint programming approach for production scheduling of multi-period virtual cellular manufacturing systems	Yes	[253]	2010	ICNC 2010	5
SchuttW10 SchuttW10	A. Schutt, A. Wolf	A New $O(n^2 \log n)$ Not-First/Not-Last Pruning Algorithm for Cumulative Resource Constraints	Yes	[334]	2010	CP 2010	15
SunLYL10 SunLYL10	Z. Sun, H. Li, M. Yao, N. Li	Scheduling Optimization Techniques for FlexRay Using Constraint-Programming	Yes	[349]	2010	GreenCom 2010	6
Acuna-AgostMFG09 Acuna-AgostMFG09	R. Acuna-Agost, P. Michelon, D. Feillet, S. Gueye	Constraint Programming and Mixed Integer Linear Programming for Rescheduling Trains under Disrupted Operations	Yes	[4]	2009	CPAIOR 2009	2
AronssonBK09 AronssonBK09	M. Aronsson, M. Bohlin, P. Kreuger	MILP formulations of cumulative constraints for railway scheduling - A comparative study	Yes	[15]	2009	ATMOS 2009	null
Baptiste09 Baptiste09	P. Baptiste	Constraint-Based Schedulers, Do They Really Work?	Yes	[25]	2009	CP 2009	1
GrimesHM09 GrimesHM09	D. Grimes, E. Hebrard, A. Malapert	Closing the Open Shop: Contradicting Conventional Wisdom	Yes	[151]	2009	CP 2009	9
Laborie09 Laborie09	P. Laborie	IBM ILOG CP Optimizer for Detailed Scheduling Illustrated on Three Problems	Yes	[220]	2009	CPAIOR 2009	15
LombardiM09 Lom- bardiM09	M. Lombardi, M. Milano	A Precedence Constraint Posting Approach for the RCPSP with Time Lags and Variable Durations	Yes	[243]	2009	CP 2009	15
MonetteDH09 Monet- teDH09	J. Monette, Y. Deville, Pascal Van Hentenryck	Just-In-Time Scheduling with Constraint Programming	Yes	[266]	2009	ICAPS 2009	null
SchuttFSW09 Schut- tFSW09	A. Schutt, T. Feydy, Peter J. Stuckey, M. Wallace	Why Cumulative Decomposition Is Not as Bad as It Sounds	Yes	[331]	2009	CP 2009	16
ThiruvadyBME09 ThiruvadyBME09	Dhananjay R. Thiruvady, C. Blum, B. Meyer, Andreas T. Ernst	Hybridizing Beam-ACO with Constraint Programming for Single Machine Job Scheduling	Yes	[361]	2009	HM 2009	15
Vilim09 Vilim09	P. Vilím	Edge Finding Filtering Algorithm for Discrete Cumulative Resources in $O(kn \log n)$ {\mathcal O}(kn {\rm log} n)	Yes	[380]	2009	CP 2009	15
cpaior-Vilim09 cpaior- Vilim09	P. Vilím	Max Energy Filtering Algorithm for Discrete Cumulative Resources	Yes	[381]	2009	CPAIOR 2009	15
BarlattCG08 BarlattCG08 BeldiceanuCP08	A. Barlatt, Amy Mainville Cohn, Oleg Yu. Gusikhin N. Beldiceanu, M. Carlsson, E. Poder	A Hybrid Approach for Solving Shift-Selection and Task-Sequencing Problems New Filtering for the cumulative Constraint in the Con-	Yes	[31]	2008	CPAIOR 2008	5
BeldiceanuCP08 BeldiceanuCP08 DoomsH08 DoomsH08	G. Dooms, Pascal Van Hentenryck	text of Non-Overlapping Rectangles Gap Reduction Techniques for Online Stochastic Project	Yes Yes	[44]	2008	CPAIOR 2008 CPAIOR 2008	15 16
HentenryckM08 Henten-	Pascal Van Hentenryck, L. Michel	Scheduling The Steel Mill Slab Design Problem Revisited	Yes	[102]	2008	CPAIOR 2008	5
ryckM08 LauLN08 LauLN08	Hoong Chuin Lau, Kong Wei Lye, Viet Bang	A Combinatorial Auction Framework for Solving Decen-	Yes	[226]	2008	CPAIOR 2008	5
MouraSCL08	Nguyen Arnaldo Vieira Moura, Cid C. de Souza, André	tralized Scheduling Problems (Extended Abstract) Planning and Scheduling the Operation of a Very Large	Yes	[271]	2008	CP 2008	16
MouraSCL08	A. Ciré, Tony Minoru Tamura Lopes	Oil Pipeline Network	168	[211]	2008	C1 2008	10
MouraSCL08a	Arnaldo Vieira Moura, Cid C. de Souza, André	Heuristics and Constraint Programming Hybridizations	Yes	[270]	2008	CSE 2008	8
MouraSCL08a PoderB08 PoderB08	A. Ciré, Tony Minoru Tamura Lopes E. Poder, N. Beldiceanu	for a Real Pipeline Planning and Scheduling Problem Filtering for a Continuous Multi-Resources cumulative	No	[303]	2008	ICAPS 2008	8
WatsonB08 WatsonB08	J. Watson, J. Christopher Beck	Constraint with Resource Consumption and Production A Hybrid Constraint Programming / Local Search Ap-	Yes	[393]	2008	CPAIOR 2008	15
AkkerDH07 AkkerDH07	J. M. van den Akker, G. Diepen, J. A. Hoogeveen	proach to the Job-Shop Scheduling Problem A Column Generation Based Destructive Lower Bound for Resource Constrained Project Scheduling Problems	Yes	[370]	2007	CPAIOR 2007	15

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
BeldiceanuP07 BeldiceanuP07	N. Beldiceanu, E. Poder	A Continuous Multi-resources cumulative Constraint with Positive-Negative Resource Consumption-Production	Yes	[45]	2007	CPAIOR 2007	15
DavenportKRSH07 DavenportKRSH07	Andrew J. Davenport, J. Kalagnanam, C. Reddy, S. Siegel, J. Hou	An Application of Constraint Programming to Generating Detailed Operations Schedules for Steel Manufacturing	Yes	[88]	2007	CP 2007	13
GarganiR07 GarganiR07	A. Gargani, P. Refalo	An Efficient Model and Strategy for the Steel Mill Slab Design Problem	Yes	[125]	2007	CP 2007	13
HoeveGSL07 Ho- eveGSL07	Willem Jan van Hoeve, Carla P. Gomes, B. Selman, M. Lombardi	Optimal Multi-Agent Scheduling with Constraint Programming		[373]	2007	AAAI 2007	6
KeriK07 KeriK07	A. Kéri, T. Kis	Computing Tight Time Windows for RCPSPWET with the Primal-Dual Method	Yes	[199]	2007	CPAIOR 2007	14
KrogtLPHJ07 KrogtLPHJ07	Roman van der Krogt, J. Little, K. Pulliam, S. Hanhilammi, Y. Jin	Scheduling for Cellular Manufacturing	Yes	[372]	2007	CP 2007	13
Limtanyakul07 Lim- tanyakul07	K. Limtanyakul	Scheduling of Tests on Vehicle Prototypes Using Constraint and Integer Programming	Yes	[236]	2007	GOR 2007	6
MonetteDD07 Monet- teDD07	J. Monette, Y. Deville, P. Dupont	A Position-Based Propagator for the Open-Shop Problem	Yes	[265]	2007	CPAIOR 2007	14
RossiTHP07 RossiTHP07	R. Rossi, A. Tarim, B. Hnich, Steven D. Prestwich	Replenishment Planning for Stochastic Inventory Systems with Shortage Cost	Yes	[321]	2007	CPAIOR 2007	15
BeniniBGM06 BeniniBGM06	L. Benini, D. Bertozzi, A. Guerri, M. Milano	Allocation, Scheduling and Voltage Scaling on Energy Aware MPSoCs	Yes	[50]	2006	CPAIOR 2006	15
GomesHS06 GomesHS06	Carla P. Gomes, Willem Jan van Hoeve, B. Selman	Constraint Programming for Distributed Planning and Scheduling	Yes	[148]	2006	AAAI 2006	2
KhemmoudjPB06 KhemmoudjPB06	Mohand Ou Idir Khemmoudj, M. Porcheron, H. Bennaceur	When Constraint Programming and Local Search Solve the Scheduling Problem of Electricité de France Nuclear Power Plant Outages	Yes	[201]	2006	CP 2006	13
KovacsV06 KovacsV06	A. Kovács, J. Váncza	Progressive Solutions: A Simple but Efficient Dominance Rule for Practical RCPSP	Yes	[214]	2006	CPAIOR 2006	13
LiuJ06 LiuJ06	Y. Liu, Y. Jiang	LP-TPOP: Integrating Planning and Scheduling Through Constraint Programming	Yes	[240]	2006	PRICAI 2006	5
QuSN06 QuSN06	Y. Qu, J. Soininen, J. Nurmi	Using Constraint Programming to Achieve Optimal Prefetch Scheduling for Dependent Tasks on Run-Time Reconfigurable Devices	Yes	[316]	2006	SoC 2006	4
AbrilSB05 AbrilSB05	M. Abril, Miguel A. Salido, F. Barber	Distributed Constraints for Large-Scale Scheduling Problems	Yes	[3]	2005	CP 2005	1
ArtiouchineB05 ArtiouchineB05	K. Artiouchine, P. Baptiste	Inter-distance Constraint: An Extension of the All- Different Constraint for Scheduling Equal Length Jobs	Yes	[18]	2005	CP 2005	15
CarchraeBF05 CarchraeBF05	T. Carchrae, J. Christopher Beck, Eugene C. Freuder	Methods to Learn Abstract Scheduling Models	Yes	[74]	2005	CP 2005	1
ChuX05 ChuX05	Y. Chu, Q. Xia	A Hybrid Algorithm for a Class of Resource Constrained Scheduling Problems	Yes	[79]	2005	CPAIOR 2005	15
DilkinaDH05 Dilki- naDH05	B. Dilkina, L. Duan, William S. Havens	Extending Systematic Local Search for Job Shop Scheduling Problems	Yes	[100]	2005	CP 2005	5
FortinZDF05 Fort- inZDF05	J. Fortin, P. Zielinski, D. Dubois, H. Fargier	Interval Analysis in Scheduling	Yes	[118]	2005	CP 2005	15
FrankK05 FrankK05	J. Frank, E. Kürklü	Mixed Discrete and Continuous Algorithms for Scheduling Airborne Astronomy Observations	Yes	[119]	2005	CPAIOR 2005	18
Geske05 Geske05	U. Geske	Railway Scheduling with Declarative Constraint Programming	Yes	[139]	2005	INAP 2005	18
HebrardTW05 HebrardTW05	E. Hebrard, P. Tyler, T. Walsh	Computing Super-Schedules	Yes	[162]	2005	CP 2005	1
KovacsEKV05 KovacsEKV05	A. Kovács, P. Egri, T. Kis, J. Váncza	Proterv-II: An Integrated Production Planning and Scheduling System	Yes	[211]	2005	CP 2005	1
QuirogaZH05 QuirogaZH05	O. Quiroga, L. Zeballos, Gabriela P. Henning	A Constraint Programming Approach to Tool Allocation and Resource Scheduling in FMS	Yes	[317]	2005	ICRA 2005	6

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
Vilim05 Vilim05	P. Vilím	Computing Explanations for the Unary Resource Constraint	Yes	[379]	2005	CPAIOR 2005	14
WolfS05 WolfS05	A. Wolf, G. Schrader	$O(n \log n)$ Overload Checking for the Cumulative Constraint and Its Application	Yes	[398]	2005	INAP 2005	14
WuBB05 WuBB05	Christine Wei Wu, Kenneth N. Brown, J. Christopher Beck	Scheduling with Uncertain Start Dates	Yes	[401]	2005	CP 2005	1
cp-Hooker05 cp- Hooker05	John N. Hooker	Planning and Scheduling to Minimize Tardiness	Yes	[179]	2005	CP 2005	14
ArtiguesBF04 ArtiguesBF04	C. Artigues, S. Belmokhtar, D. Feillet	A New Exact Solution Algorithm for the Job Shop Prob- lem with Sequence-Dependent Setup Times	Yes	[16]	2004	CPAIOR 2004	13
HentenryckM04 HentenryckM04	Pascal Van Hentenryck, L. Michel	Scheduling Abstractions for Local Search	Yes	[172]	2004	CPAIOR 2004	16
Hooker04 Hooker04	John N. Hooker	A Hybrid Method for Planning and Scheduling	Yes	[177]	2004	CP 2004	12
KovacsV04 KovacsV04	A. Kovács, J. Váncza	Completable Partial Solutions in Constraint Programming and Constraint-Based Scheduling	Yes	[213]	2004	CP 2004	15
LimRX04 LimRX04	A. Lim, B. Rodrigues, Z. Xu	Solving the Crane Scheduling Problem Using Intelligent Search Schemes	Yes	[233]	2004	CP 2004	5
MaraveliasG04 MaraveliasG04	Christos T. Maravelias, Ignacio E. Grossmann	Using MILP and CP for the Scheduling of Batch Chemical Processes	Yes	[257]	2004	CPAIOR 2004	20
Sadykov04 Sadykov04	R. Sadykov	A Hybrid Branch-And-Cut Algorithm for the One-Machine Scheduling Problem	Yes	[323]	2004	CPAIOR 2004	7
Vilim04 Vilim04	P. Vilím	$O(n \log n)$ Filtering Algorithms for Unary Resource Constraint	Yes	[378]	2004	CPAIOR 2004	13
VilimBC04 VilimBC04	P. Vilím, R. Barták, O. Cepek	Unary Resource Constraint with Optional Activities	Yes	[383]	2004	CP 2004	15
VillaverdeP04 VillaverdeP04	K. Villaverde, E. Pontelli	An Investigation of Scheduling in Distributed Constraint Logic Programming	No	[386]	2004	ISCA 2004	6
WolinskiKG04 WolinskiKG04	C. Wolinski, K. Kuchcinski, Maya B. Gokhale	A Constraints Programming Approach to Communication Scheduling on SoPC Architectures	Yes	[399]	2004	DSD 2004	8
WolinskiKG04a Wolin- skiKG04a	C. Wolinski, K. Kuchcinski, Maya B. Gokhale	A constraints programming approach to communication scheduling on SoPC architectures	No	[400]	2004	FPGA 2004	1
DannaP03 DannaP03	E. Danna, L. Perron	Structured vs. Unstructured Large Neighborhood Search: A Case Study on Job-Shop Scheduling Problems with Ear- liness and Tardiness Costs	Yes	[85]	2003	CP 2003	5
Kumar03 Kumar03	T. K. Satish Kumar	Incremental Computation of Resource-Envelopes in Producer-Consumer Models	Yes	[219]	2003	CP 2003	15
OddiPCC03 Odd- iPCC03	A. Oddi, N. Policella, A. Cesta, G. Cortellessa	Generating High Quality Schedules for a Spacecraft Memory Downlink Problem	Yes	[288]	2003	CP 2003	15
ValleMGT03 ValleMGT03	Carmelo Del Valle, Antonio A. Márquez, Rafael M. Gasca, M. Toro	On Selecting and Scheduling Assembly Plans Using Constraint Programming	Yes	[369]	2003	KES 2003	8
Vilim03 Vilim03	P. Vilím	Computing Explanations for Global Scheduling Constraints	Yes	[377]	2003	CP 2003	1
Wolf03 Wolf03	A. Wolf	Pruning while Sweeping over Task Intervals	Yes	[397]	2003	CP 2003	15
Bartak02 Bartak02	R. Barták	Visopt ShopFloor: On the Edge of Planning and Scheduling	Yes	[33]	2002	CP 2002	16
Bartak02a Bartak02a	R. Barták	Visopt ShopFloor: Going Beyond Traditional Scheduling	Yes	[32]	2002	ERCIM/CologNet 2002	15
BeldiceanuC02 BeldiceanuC02	N. Beldiceanu, M. Carlsson	A New Multi-resource cumulatives Constraint with Negative Heights	Yes	[42]	2002	CP 2002	17
ElkhyariGJ02 ElkhyariGJ02	A. Elkhyari, C. Guéret, N. Jussien	Conflict-Based Repair Techniques for Solving Dynamic Scheduling Problems	Yes	[107]	2002	CP 2002	6
ElkhyariGJ02a ElkhyariGJ02a	A. Elkhyari, C. Guéret, N. Jussien	Solving Dynamic Resource Constraint Project Scheduling Problems Using New Constraint Programming Tools	Yes	[108]	2002	PATAT 2002	24
HookerY02 HookerY02	John N. Hooker, H. Yan	A Relaxation of the Cumulative Constraint	Yes	[182]	2002	CP 2002	5
KamarainenS02 KamarainenS02	O. Kamarainen, Hani El Sakkout	Local Probing Applied to Scheduling	Yes	[190]	2002	CP 2002	17
Muscettola02 Muscettola02	N. Muscettola	Computing the Envelope for Stepwise-Constant Resource Allocations $$	Yes	[275]	2002	CP 2002	16

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
Vilim02 Vilim02	P. Vilím	Batch Processing with Sequence Dependent Setup Times	Yes	[376]	2002	CP 2002	1
ZhuS02 ZhuS02	Kenny Qili Zhu, Andrew E. Santosa	A Meeting Scheduling System Based on Open Constraint Programming	Yes	[417]	2002	CAiSE 2002	5
VanczaM01 VanczaM01	J. Váncza, A. Márkus	A Constraint Engine for Manufacturing Process Planning		[374]	2001	CP 2001	15
VerfaillieL01 VerfaillieL01	G. Verfaillie, M. Lemaître	Selecting and Scheduling Observations for Agile Satellites: Some Lessons from the Constraint Reasoning Community Point of View	Yes	[375]	2001	CP 2001	15
AngelsmarkJ00 AngelsmarkJ00	O. Angelsmark, P. Jonsson	Some Observations on Durations, Scheduling and Allen's Algebra	Yes	[10]	2000	CP 2000	5
KorbaaYG99 KorbaaYG99	O. Korbaa, P. Yim, J. Gentina	Solving transient scheduling problem for cyclic production using timed Petri nets and constraint programming	Yes	[206]	1999	ECC 1999	8
CestaOS98 CestaOS98	A. Cesta, A. Oddi, Stephen F. Smith	Scheduling Multi-capacitated Resources Under Complex Temporal Constraints	Yes	[77]	1998	CP 1998	1
FrostD98 FrostD98	D. Frost, R. Dechter	Optimizing with Constraints: A Case Study in Scheduling Maintenance of Electric Power Units	Yes	[123]	1998	CP 1998	1
GruianK98 GruianK98	F. Gruian, K. Kuchcinski	Operation Binding and Scheduling for Low Power Using Constraint Logic Programming	Yes	[155]	1998	EUROMICRO 1998	8
PembertonG98 PembertonG98	Joseph C. Pemberton, Flavius Galiber III	A constraint-based approach to satellite scheduling	No	[298]	1998	DIMACS 1998	14
RodosekW98 RodosekW98	R. Rodosek, M. Wallace	A Generic Model and Hybrid Algorithm for Hoist Scheduling Problems	Yes	[320]	1998	CP 1998	15
BaptisteP97 BaptisteP97	P. Baptiste, Claude Le Pape	Constraint Propagation and Decomposition Techniques for Highly Disjunctive and Highly Cumulative Project Scheduling Problems	Yes	[28]	1997	CP 1997	15
BeckDF97 BeckDF97	J. Christopher Beck, Andrew J. Davenport, Mark S. Fox	Five Pitfalls of Empirical Scheduling Research	Yes	[37]	1997	CP 1997	15
BoucherBVBL97 BoucherBVBL97	E. Boucher, A. Bachelu, C. Varnier, P. Baptiste, B. Legeard	Multi-criteria Comparison Between Algorithmic, Constraint Logic and Specific Constraint Programming on a Real Schedulingt Problem	No	[66]	1997	PACT 1997	18
Caseau97 Caseau97	Y. Caseau	Using Constraint Propagation for Complex Scheduling Problems: Managing Size, Complex Resources and Travel	Yes	[75]	1997	CP 1997	4
PapeB97 PapeB97	Claude Le Pape, P. Baptiste	A Constraint Programming Library for Preemptive and Non-Preemptive Scheduling	No	[295]	1997	PACT 1997	20
Colombani96 Colombani96	Y. Colombani	Constraint Programming: an Efficient and Practical Approach to Solving the Job-Shop Problem	Yes	[84]	1996	CP 1996	15
Zhou96 Zhou96	J. Zhou	A Constraint Program for Solving the Job-Shop Problem	Yes	[414]	1996	CP 1996	15
Goltz95 Goltz95	H. Goltz	Reducing Domains for Search in CLP(FD) and Its Application to Job-Shop Scheduling	Yes	[147]	1995	CP 1995	14
Puget95 Puget95	J. Puget	Applications of Constraint Programming	Yes	[313]	1995	CP 1995	4
Simonis95 Simonis95	H. Simonis	The CHIP System and Its Applications	Yes	[343]	1995	CP 1995	4
SimonisC95 SimonisC95 Touraivane95	H. Simonis, T. Cornelissens Touraïvane	Modelling Producer/Consumer Constraints Constraint Programming and Industrial Applications	Yes Yes	[345] [366]	1995 1995	CP 1995 CP 1995	14
Touraivane95				. ,			
JourdanFRD94 JourdanFRD94	J. Jourdan, F. Fages, D. Rozzonelli, A. Demeure	Data Alignment and Task Scheduling On Parallel Machines Using Concurrent Constraint Model-based Programming	No	[187]	1994	ILPS 1994	1
AggounB92 AggounB92	A. Aggoun, N. Beldiceanu	Extending CHIP in order to solve complex scheduling and placement problems	No	[5]	1992	JFPL 1992	1
BaptisteLV92 BaptisteLV92	P. Baptiste, B. Legeard, C. Varnier	Hoist scheduling problem: an approach based on constraint logic programming	Yes	[30]	1992	ICRA 1992	6
ErtlK91 ErtlK91	M. Anton Ertl, A. Krall	Optimal İnstruction Scheduling using Constraint Logic Programming	Yes	[109]	1991	PLILP 1991	12

		Table 2: Manuall	y Defined Pape	er Properties	3			
Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints
AalianPG23 AalianPG23	Optimization of Short-Term Underground Mine Planning Using Constraint Programming	CP Opt	n		n			?
Bit-Monnot23 Bit- Monnot23	Enhancing Hybrid CP-SAT Search for Disjunctive Scheduling	ARIES CP Opt OR-Tools Mistral	у		У	-	JSSP OSSP	-
EfthymiouY23 EfthymiouY23	Predicting the Optimal Period for Cyclic Hoist Scheduling Problems	OR-Tools	n		n	-	CHSP	-
JuvinHHL23 Juvin- HHL23	An Efficient Constraint Programming Approach to Preemptive Job Shop Scheduling	CP Opt Mistral	ref		У		PJSSP	endBeforeStart span noOverlap
JuvinHL23 JuvinHL23	Constraint Programming for the Robust Two-Machine Flow-Shop Scheduling Problem with Budgeted Uncer- tainty	CP Opt Cplex	ref		n	-	Perm FSSP	endBeforeStart noOverlap sameSequence
KameugneFND23 KameugneFND23	Horizontally Elastic Edge Finder Rule for Cumulative Constraint Based on Slack and Density	?	BL PSPlib		n	-	RCPSPs	cumulative
KimCMLLP23 KimCM- LLP23	Iterated Greedy Constraint Programming for Scheduling Steelmaking Continuous Casting	Gurobi OR-Tools	у		n	-	SCC	alternative noOverlap
Mehdizadeh-Somarin23 Mehdizadeh-Somarin23	A Constraint Programming Model for a Reconfigurable Job Shop Scheduling Problem with Machine Availability	CP Opt	n		n	-	JSSP RMS	alternative endBeforeStart noOverlap
PerezGSL23 PerezGSL23	A Constraint Programming Model for Scheduling the Unloading of Trains in Ports	custom	n		n	-	SUTP	table disjunctive
PovedaAA23 PovedaAA23	Partially Preemptive Multi Skill/Mode Resource- Constrained Project Scheduling with Generalized Precedence Relations and Calendars	CP Opt MiniZinc Chuffed	у		У		PP-MS-MMRCPSP/max-cal	
SquillaciPR23 Squil- laciPR23	Scheduling Complex Observation Requests for a Constellation of Satellites: Large Neighborhood Search Approaches	Cplex Studio	у		n	-	EOSP	?
TardivoDFMP23 TardivoDFMP23	Constraint Propagation on GPU: A Case Study for the Cumulative Constraint	MiniCPP MiniZinc	PSPLib BL Pack		У	-	RCPSP	cumulative
TasselGS23 TasselGS23	An End-to-End Reinforcement Learning Approach for Job-Shop Scheduling Problems Based on Constraint Pro- gramming	custom Choco	ref		У	-	JSSP	noOverlap
WangB23 WangB23	Dynamic All-Different and Maximal Cliques Constraints for Fixed Job Scheduling	FaCiLe	(y)		n	[390]	FJS	-
YuraszeckMC23 YuraszeckMC23	A competitive constraint programming approach for the group shop scheduling problem	CP Opt	ref		n	-	GSSP	noOverlap endBeforeStart
ArmstrongGOS22 ArmstrongGOS22	A Two-Phase Hybrid Approach for the Hybrid Flexible Flowshop with Transportation Times	CP Opt	(y)		-	[13]	$HFFm tt C_{ m max}$	endBeforeStart alternative cumulative noOverlap
BoudreaultSLQ22 BoudreaultSLQ22	A Constraint Programming Approach to Ship Refit Project Scheduling	MiniZinc Chuffed			У	-	RCPSP	cumulative
GeitzGSSW22 GeitzGSSW22	Solving the Extended Job Shop Scheduling Problem with AGVs - Classical and Quantum Approaches	firstCS QUBO	У		n	-	JSSP	
LiFJZLL22 LiFJZLL22	Constraint Programming for a Novel Integrated Optimization of Blocking Job Shop Scheduling and Variable-Speed Transfer Robot Assignment	OPL CP Opt	ref		n	-	BJSSP	endBEforeStart alternative noOverlap
OuelletQ22 OuelletQ22	A MinCumulative Resource Constraint	Choco	У		У	-		cumulative minCumulative
OujanaAYB22 Ou- janaAYB22	Solving a realistic hybrid and flexible flow shop scheduling problem through constraint programming: industrial case in a packaging company	CP Opt	n		n	-	HFFS	alternative span noOverlap endBeforeStart

		Table 2: Manuall	y Defined Pape	r Properties	5			
Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints
PopovicCGNC22 PopovicCGNC22	Scheduling the Equipment Maintenance of an Electric Power Transmission Network Using Constraint Program- ming	CP Opt	n		n	-	TMS	alwaysIn noOverlap
Teppan22 Teppan22	Types of Flexible Job Shop Scheduling: A Constraint Programming Experiment	?	?		?	?	?	?
TouatBT22 TouatBT22	A Constraint Programming Model for the Scheduling Problem with Flexible Maintenance under Human Re- source Constraints	?	?		?	?	?	?
WinterMMW22 Winter- MMW22	Modeling and Solving Parallel Machine Scheduling with Contamination Constraints in the Agricultural Industry	Cplex Gurobi CP Opt Sim Anneal	у		У	-	PMSP	alternative noOverlap
ZhangJZL22 ZhangJZL22	Constraint Programming for Modeling and Solving a Hybrid Flow Shop Scheduling Problem	OP Opt	ref		n	-	HFSP	alternative endBeforeStart noOverlap cumulative
AntuoriHHEN21 AntuoriHHEN21	Combining Monte Carlo Tree Search and Depth First Search Methods for a Car Manufacturing Workshop Scheduling Problem	MCTS	у		У			Camarative
ArmstrongGOS21 ArmstrongGOS21	The Hybrid Flexible Flowshop with Transportation Times	MiniZinc Chuffed CP Opt SICStus	у		У	-	$HFFm tt C_{ m max}$	cumulative diffn table
Astrand0F21 As- trand0F21	Short-Term Scheduling of Production Fleets in Underground Mines Using CP-Based LNS	Gecode	ref generated		n	-		-
BenderWS21 BenderWS21	Applying Constraint Programming to the Multi-mode Scheduling Problem in Harvest Logistics	CP Opt	у		n	-	MRCPSP	noOverlap alternative
GeibingerKKMMW21 GeibingerKKMMW21	Physician Scheduling During a Pandemic	MiniZinc	У		n	-		nvalue
GeibingerMM21 GeibingerMM21	Constraint Logic Programming for Real-World Test Laboratory Scheduling	clingcon	У				TLSP RCPSP	disjunctive
HanenKP21 HanenKP21	Two Deadline Reduction Algorithms for Scheduling Dependent Tasks on Parallel Processors	Python	ref		n	-	$P prec, r_i, d_i *$	-
HillTV21 HillTV21	A Computational Study of Constraint Programming Approaches for Resource-Constrained Project Scheduling with Autonomous Learning Effects	CP Opt	PSPlib		n	-	RCPSP	${ m cumulative} \ { m alternative} \ { m endBeforeStart} \$
KlankeBYE21 Klanke- BYE21	Combining Constraint Programming and Temporal Decomposition Approaches - Scheduling of an Industrial Formulation Plant	OR-Tools	n		n	-		cumulative circuit noOverlap
KovacsTKSG21 KovacsTKSG21	Utilizing Constraint Optimization for Industrial Machine Workload Balancing	Gurobi OR-Tools Cplex CP Opt	у		у	-	extended RCPSP	$\operatorname{cumulative}$
LacknerMMWW21 LacknerMMWW21	Minimizing Cumulative Batch Processing Time for an Industrial Oven Scheduling Problem	CP Opt Chuffed OR-Tools Gurobi OPL	У		У		OSP	
BarzegaranZP20 BarzegaranZP20	Quality-Of-Control-Aware Scheduling of Communication in TSN-Based Fog Computing Platforms Using Con- straint Programming	J. 2						
GodetLHS20 GodetLHS20	Using Approximation within Constraint Programming to Solve the Parallel Machine Scheduling Problem with Ad- ditional Unit Resources							
GroleazNS20 GroleazNS20	Solving the Group Cumulative Scheduling Problem with CPO and ACO	CP Opt ACO	-		-	[154]	GCSP	group cumulative

	Table 2: Manually Defined Paper Properties										
Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints			
GroleazNS20a GroleazNS20a	ACO with automatic parameter selection for a scheduling problem with a group cumulative constraint										
Mercier-AubinGQ20 Mercier-AubinGQ20	Leveraging Constraint Scheduling: A Case Study to the Textile Industry	MiniZinc Chuffed	a		a	-		circuit cumulative			
NattafM20 NattafM20	Filtering Rules for Flow Time Minimization in a Parallel Machine Scheduling Problem	Cplex CP Opt	-		-	[254]	PTC	alternative noOverlap			
TangB20 TangB20	CP and Hybrid Models for Two-Stage Batching and Scheduling	Cplex CP Opt	n		n	-	2BPHFSP	span alwaysIn			
WangB20 WangB20	Global Propagation of Transition Cost for Fixed Job Scheduling	FaCiLe	у		n	-	FJS	-			
WessenCS20 WessenCS20	Scheduling of Dual-Arm Multi-tool Assembly Robots and Workspace Layout Optimization	Gecode	n		n	-		circuit alldifferent			
BadicaBIL19 Badica- BIL19 BehrensLM19 BehrensLM19	Exploring the Space of Block Structured Scheduling Processes Using Constraint Logic Programming A Constraint Programming Approach to Simultaneous Task Allocation and Motion Scheduling for Industrial										
BogaerdtW19 Bo-	Dual-Arm Manipulation Tasks Lower Bounds for Uniform Machine Scheduling Using De-										
gaerdtW19 ColT19 ColT19	cision Diagrams Industrial Size Job Shop Scheduling Tackled by Present	CP Opt	y		y	-	JSSP	noOverlap			
FrimodigS19 FrimodigS19	Day CP Solvers Models for Radiation Therapy Patient Scheduling	OR-Tools Mini-Zinc Gecode Cplex	n		n	-		cumulative regular			
FrohnerTR19 FrohnerTR19	Casual Employee Scheduling with Constraint Programming and Metaheuristics	Орієх						bin-packing			
GalleguillosKSB19 GalleguillosKSB19	Constraint Programming-Based Job Dispatching for Modern HPC Applications	OR-Tools			У		on-line dispatch				
GeibingerMM19 GeibingerMM19 LiuLH19 LiuLH19	Investigating Constraint Programming for Real World Industrial Test Laboratory Scheduling Solving the Talent Scheduling Problem by Parallel Con-										
MalapertN19 MalapertN19	straint Programming A New CP-Approach for a Parallel Machine Scheduling Problem with Time Constraints on Machine Qualifica- tions										
MurinR19 MurinR19	Scheduling of Mobile Robots Using Constraint Programming	CP Opt Cplex OPL	у		У		JSPT	endBeforeStart alternative noOverlap			
ParkUJR19 ParkUJR19	Developing a Production Scheduling System for Modular Factory Using Constraint Programming	OLE									
Tom19 Tom19	Fuzzy Multi-Constraint Programming Model for Weekly Meals Scheduling										
YangSS19 YangSS19 ArbaouiY18 ArbaouiY18	Time Table Edge Finding with Energy Variables Solving the Unrelated Parallel Machine Scheduling Prob- lem with Additional Resources Using Constraint Pro- gramming										
AstrandJZ18 AstrandJZ18	Fleet Scheduling in Underground Mines Using Constraint Programming										
BenediktSMVH18 BenediktSMVH18	Energy-Aware Production Scheduling with Power-Saving Modes										
DemirovicS18 DemirovicS18	Constraint Programming for High School Timetabling: A Scheduling-Based Model with Hot Starts										
He0GLW18 He0GLW18	A Fast and Scalable Algorithm for Scheduling Large Numbers of Devices Under Real-Time Pricing										

Table 2: Manually Defined Paper Properties									
Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	
HoYCLLCLC18 HoY- CLLCLC18	A Platform for Dynamic Optimal Nurse Scheduling Based on Integer Linear Programming along with Multiple Cri- teria Constraints								
KameugneFGOQ18 KameugneFGOQ18	Horizontally Elastic Not-First/Not-Last Filtering Algorithm for Cumulative Resource Constraint								
Laborie18a Laborie18a	An Update on the Comparison of MIP, CP and Hybrid Approaches for Mixed Resource Allocation and Schedul- ing								
NishikawaSTT18 NishikawaSTT18	Scheduling of Malleable Fork-Join Tasks with Constraint Programming								
NishikawaSTT18a NishikawaSTT18a	Scheduling of Malleable Tasks Based on Constraint Programming								
OuelletQ18 OuelletQ18	A O(n \log ^2 n) Checker and O(n^2 \log n) Filtering Algorithm for the Energetic Reasoning								
RiahiNS018 RiahiNS018	Local Search for Flowshops with Setup Times and Blocking Constraints								
Tesch18 Tesch18	Improving Energetic Propagations for Cumulative Scheduling								
BofillCSV17 BofillCSV17	An Efficient SMT Approach to Solve MRCPSP/max Instances with Tight Constraints on Resources								
CappartS17 CappartS17	Rescheduling Railway Traffic on Real Time Situations Using Time-Interval Variables								
GelainPRVW17 Gelain- PRVW17	A Local Search Approach for Incomplete Soft Constraint Problems: Experimental Results on Meeting Scheduling Problems								
GoldwaserS17 Gold- waserS17	Optimal Torpedo Scheduling								
Hooker17 Hooker17 KletzanderM17 Kletzan-	Job Sequencing Bounds from Decision Diagrams A Multi-stage Simulated Annealing Algorithm for the								
derM17 LiuCGM17 LiuCGM17	Torpedo Scheduling Problem NightSplitter: A Scheduling Tool to Optimize (Sub)group								
Madi-WambaLOBM17	Activities Green Energy Aware Scheduling Problem in Virtualized								
Madi-WambaLOBM17 MossigeGSMC17 MossigeGSMC17	Datacenters Time-Aware Test Case Execution Scheduling for Cyber-Physical Systems								
Pralet17 Pralet17	An Incomplete Constraint-Based System for Scheduling with Renewable Resources								
YoungFS17 YoungFS17	Constraint Programming Applied to the Multi-Skill Project Scheduling Problem								
BonfiettiZLM16 Bonfiet- tiZLM16	The Multirate Resource Constraint								
BoothNB16 BoothNB16	A Constraint Programming Approach to Multi-Robot Task Allocation and Scheduling in Retirement Homes								
CauwelaertDMS16 CauwelaertDMS16	Efficient Filtering for the Unary Resource with Family-Based Transition Times								
FontaineMH16 FontaineMH16	Parallel Composition of Scheduling Solvers								
GilesH16 GilesH16	Solving a Supply-Delivery Scheduling Problem with Constraint Programming								
GingrasQ16 GingrasQ16	Generalizing the Edge-Finder Rule for the Cumulative Constraint								
HechingH16 HechingH16	Scheduling Home Hospice Care with Logic-Based Benders Decomposition								
LimHTB16 LimHTB16	Online HVAC-Aware Occupancy Scheduling with Adaptive Temperature Control								

		Table 2: Manual	lly Defined Pape	er Properties	3	Table 2: Manually Defined Paper Properties									
Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints							
Madi-WambaB16 Madi- WambaB16	The TaskIntersection Constraint														
SchuttS16 SchuttS16 SzerediS16 SzerediS16	Explaining Producer/Consumer Constraints Modelling and Solving Multi-mode Resource-Constrained Project Scheduling														
Tesch16 Tesch16	A Nearly Exact Propagation Algorithm for Energetic Reasoning in \mathcal O(n^2 \log n)														
BofillGSV15 Bofill- GSV15	MaxSAT-Based Scheduling of B2B Meetings														
BurtLPS15 BurtLPS15	Scheduling with Fixed Maintenance, Shared Resources and Nonlinear Feedrate Constraints: A Mine Planning Case Study														
DejemeppeCS15 DejemeppeCS15	The Unary Resource with Transition Times														
EvenSH15 EvenSH15	A Constraint Programming Approach for Non-preemptive Evacuation Scheduling														
GayHLS15 GayHLS15 GayHS15 GayHS15	Conflict Ordering Search for Scheduling Problems Simple and Scalable Time-Table Filtering for the Cumulative Constraint														
KreterSS15 KreterSS15 LimBTBB15 LimBTBB15	Modeling and Solving Project Scheduling with Calendars Large Neighborhood Search for Energy Aware Meeting Scheduling in Smart Buildings														
LombardiBM15 Lom- bardiBM15	Deterministic Estimation of the Expected Makespan of a POS Under Duration Uncertainty														
MelgarejoLS15 Melgare- joLS15	A Time-Dependent No-Overlap Constraint: Application to Urban Delivery Problems														
MurphyMB15 MurphyMB15 PesantRR15 Pe-	Design and Evaluation of a Constraint-Based Energy Sav- ing and Scheduling Recommender System A Comparative Study of MIP and CP Formulations for														
santRR15 PraletLJ15 PraletLJ15	the B2B Scheduling Optimization Problem Scheduling Running Modes of Satellite Instruments Using														
SialaAH15 SialaAH15	Constraint-Based Local Search Two Clause Learning Approaches for Disjunctive Schedul-														
VilimLS15 VilimLS15	ing Failure-Directed Search for Constraint-Based Scheduling														
ZhouGL15 ZhouGL15	On complex hybrid flexible flowshop scheduling problems based on constraint programming														
cpaior-GayHS15 cpaior- GayHS15 AlesioNBG14 Ale-	Time-Table Disjunctive Reasoning for the Cumulative Constraint Worst-Case Scheduling of Software Tasks - A Constraint														
sioNBG14 BartoliniBBLM14 Bar-	Optimization Model to Support Performance Testing Proactive Workload Dispatching on the EURORA Super-														
toliniBBLM14 BessiereHMQW14	computer Buffered Resource Constraint: Algorithms and Complex-														
BessiereHMQW14 BofillEGPSV14 Bofil-	ity Scheduling B2B Meetings														
lEGPSV14 BonfiettiLM14 Bonfiet- tiLM14	Disregarding Duration Uncertainty in Partial Order Schedules? Yes, We Can!														
DejemeppeD14 DejemeppeD14	Continuously Degrading Resource and Interval Dependent Activity Durations in Nuclear Medicine Patient Scheduling														
DerrienP14 DerrienP14	A New Characterization of Relevant Intervals for Energetic Reasoning														
DerrienPZ14 DerrienPZ14	A Declarative Paradigm for Robust Cumulative Scheduling														

	Table 2: Manually Defined Paper Properties CD System - Data April - Code April - Board On - Chariff action - Constraints								
Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	
DoulabiRP14 Doula- biRP14 FriedrichFMRSST14	A Constraint Programming-Based Column Generation Approach for Operating Room Planning and Scheduling Representing Production Scheduling with Constraint An-								
FriedrichFMRSST14 GaySS14 GaySS14	swer Set Programming Continuous Casting Scheduling with Constraint Programming								
HoundjiSWD14 Hound- jiSWD14	The StockingCost Constraint								
KoschB14 KoschB14	A New MIP Model for Parallel-Batch Scheduling with Non-identical Job Sizes								
CireCH13 CireCH13	Mixed Integer Programming vs. Logic-Based Benders De- composition for Planning and Scheduling	CP Opt Cplex	dead		n	-			
GuSS13 GuSS13	A Lagrangian Relaxation Based Forward-Backward Improvement Heuristic for Maximising the Net Present Value of Resource-Constrained Projects	Chuffed	dead			-	RCPSPDC	$\begin{array}{c} \text{cumulative} \\ \text{maxNVPProp} \end{array}$	
HeinzKB13 HeinzKB13	Recent Improvements Using Constraint Integer Programming for Resource Allocation and Scheduling								
KelarevaTK13 KelarevaTK13	CP Methods for Scheduling and Routing with Time- Dependent Task Costs	MiniZinc CPX G12FD	ref		-	-	LSFRP BPCTOP	${ m all different} \\ { m all different Except 0}$	
LetortCB13 LetortCB13	A Synchronized Sweep Algorithm for the k-dimensional cumulative Constraint	SICStus Choco	PSPlib		-	-	RCPSP	cumulative kDimensionalCumulative	
OuelletQ13 OuelletQ13	Time-Table Extended-Edge-Finding for the Cumulative Constraint								
SchuttFS13 SchuttFS13	Scheduling Optional Tasks with Explanation								
cpaior-SchuttFS13 cpaior-SchuttFS13	Explaining Time-Table-Edge-Finding Propagation for the Cumulative Resource Constraint	Mercury G12	PSPlib AT BL Pack KSD15D PackD		-	-	RCPSP	$\operatorname{cumulative}$	
BillautHL12 Bil- lautHL12 BonfiettiLBM12 Bonfi- ettiLBM12	Complete Characterization of Near-Optimal Sequences for the Two-Machine Flow Shop Scheduling Problem Global Cyclic Cumulative Constraint		T don't						
HeinzB12 HeinzB12	Reconsidering Mixed Integer Programming and MIP-Based Hybrids for Scheduling								
IfrimOS12 IfrimOS12 LetortBC12 LetortBC12	Properties of Energy-Price Forecasts for Scheduling A Scalable Sweep Algorithm for the cumulative Con- straint								
RendlPHPR12 RendlPHPR12	Hybrid Heuristics for Multimodal Homecare Scheduling								
SchuttCSW12 SchuttCSW12	Maximising the Net Present Value for Resource- Constrained Project Scheduling								
SerraNM12 SerraNM12	The Offshore Resources Scheduling Problem: Detailing a Constraint Programming Approach								
SimoninAHL12 Simoni- nAHL12	Scheduling Scientific Experiments on the Rosetta/Philae Mission	MOST Ilog Scheduler	n		n	-		cumulative dataTransfer	
ZhangLS12 ZhangLS12	Model and Solution for Hot Strip Rolling Scheduling Problem Based on Constraint Programming Method								
BonfiettiLBM11 BonfiettiLBM11	A Constraint Based Approach to Cyclic RCPSP								
ChapadosJR11 ChapadosJR11	Retail Store Workforce Scheduling by Expected Operating Income Maximization								
ClercqPBJ11 Clerc- qPBJ11	Filtering Algorithms for Discrete Cumulative Problems with Overloads of Resource								

		Table 2: Manua	lly Defined Pape	er Properties	3			
Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints
EdisO11 EdisO11	Parallel Machine Scheduling with Additional Resources: A Lagrangian-Based Constraint Programming Approach							
GrimesH11 GrimesH11	Models and Strategies for Variants of the Job Shop Scheduling Problem							
HeinzS11 HeinzS11	Explanations for the Cumulative Constraint: An Experimental Study							
HermenierDL11 HermenierDL11	Bin Repacking Scheduling in Virtualized Datacenters							
KameugneFSN11 KameugneFSN11	A Quadratic Edge-Finding Filtering Algorithm for Cumulative Resource Constraints							
LahimerLH11 LahimerLH11	Climbing Depth-Bounded Adjacent Discrepancy Search for Solving Hybrid Flow Shop Scheduling Problems with Multiprocessor Tasks							
LombardiBMB11 Lom- bardiBMB11	Precedence Constraint Posting for Cyclic Scheduling Problems							
Vilim11 Vilim11	Timetable Edge Finding Filtering Algorithm for Discrete Cumulative Resources							
ZibranR11 ZibranR11	Conflict-Aware Optimal Scheduling of Code Clone Refactoring: A Constraint Programming Approach							
ZibranR11a ZibranR11a	A Constraint Programming Approach to Conflict-Aware Optimal Scheduling of Prioritized Code Clone Refactoring							
BertholdHLMS10 BertholdHLMS10	A Constraint Integer Programming Approach for Resource-Constrained Project Scheduling							
CobanH10 CobanH10	Single-Facility Scheduling over Long Time Horizons by Logic-Based Benders Decomposition							
Davenport10 Daven- port10	Integrated Maintenance Scheduling for Semiconductor Manufacturing							
GrimesH10 GrimesH10	Job Shop Scheduling with Setup Times and Maximal Time-Lags: A Simple Constraint Programming Approach							
LombardiM10 LombardiM10	Constraint Based Scheduling to Deal with Uncertain Durations and Self-Timed Execution							
MakMS10 MakMS10	A constraint programming approach for production scheduling of multi-period virtual cellular manufacturing systems							
SchuttW10 SchuttW10	A New $O(n^2 \log n)$ Not-First/Not-Last Pruning Algorithm for Cumulative Resource Constraints							
SunLYL10 SunLYL10	Scheduling Optimization Techniques for FlexRay Using Constraint-Programming							
Acuna-AgostMFG09 Acuna-AgostMFG09	Constraint Programming and Mixed Integer Linear Programming for Rescheduling Trains under Disrupted Operations							
AronssonBK09 AronssonBK09	MILP formulations of cumulative constraints for railway scheduling - A comparative study							
Baptiste09 Baptiste09 GrimesHM09	Constraint-Based Schedulers, Do They Really Work? Closing the Open Shop: Contradicting Conventional Wis-							
GrimesHM09 Laborie09 Laborie09	dom IBM ILOG CP Optimizer for Detailed Scheduling Illustrated on Three Problems							
LombardiM09 Lom- bardiM09	A Precedence Constraint Posting Approach for the RCPSP with Time Lags and Variable Durations							
MonetteDH09 Monet- teDH09	Just-In-Time Scheduling with Constraint Programming							
SchuttFSW09 SchuttFSW09	Why Cumulative Decomposition Is Not as Bad as It Sounds							
ThiruvadyBME09 ThiruvadyBME09	Hybridizing Beam-ACO with Constraint Programming for Single Machine Job Scheduling							

	Table 2: Manually Defined Paper Properties CR System Deta April Sol April Read On Classification Constraints									
Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints		
Vilim09 Vilim09	Edge Finding Filtering Algorithm for Discrete Cumulative Resources in $O(kn \log n)$ {\mathcal O}(kn {\rm log} n)									
cpaior-Vilim09 cpaior- Vilim09	Max Energy Filtering Algorithm for Discrete Cumulative Resources									
BarlattCG08 BarlattCG08	A Hybrid Approach for Solving Shift-Selection and Task-Sequencing Problems									
BeldiceanuCP08 BeldiceanuCP08	New Filtering for the cumulative Constraint in the Context of Non-Overlapping Rectangles									
DoomsH08 DoomsH08	Gap Reduction Techniques for Online Stochastic Project Scheduling									
HentenryckM08 HentenryckM08	The Steel Mill Slab Design Problem Revisited									
LauLN08 LauLN08	A Combinatorial Auction Framework for Solving Decentralized Scheduling Problems (Extended Abstract)									
MouraSCL08 MouraSCL08	Planning and Scheduling the Operation of a Very Large Oil Pipeline Network									
MouraSCL08a	Heuristics and Constraint Programming Hybridizations									
MouraSCL08a PoderB08 PoderB08	for a Real Pipeline Planning and Scheduling Problem Filtering for a Continuous Multi-Resources cumulative									
r oderbos r oderbos	Constraint with Resource Consumption and Production									
WatsonB08 WatsonB08	A Hybrid Constraint Programming / Local Search Approach to the Job-Shop Scheduling Problem									
AkkerDH07 AkkerDH07	A Column Generation Based Destructive Lower Bound for Resource Constrained Project Scheduling Problems									
BeldiceanuP07	A Continuous Multi-resources cumulative Con-									
BeldiceanuP07	straint with Positive-Negative Resource Consumption- Production									
DavenportKRSH07 Dav- enportKRSH07	An Application of Constraint Programming to Generating Detailed Operations Schedules for Steel Manufacturing									
GarganiR07 GarganiR07	An Efficient Model and Strategy for the Steel Mill Slab									
9	Design Problem									
HoeveGSL07 Ho- eveGSL07 KeriK07 KeriK07	Optimal Multi-Agent Scheduling with Constraint Programming									
KrogtLPHJ07	Computing Tight Time Windows for RCPSPWET with the Primal-Dual Method Scheduling for Cellular Manufacturing									
KrogtLPHJ07 Limtanyakul07 Lim-	Scheduling of Tests on Vehicle Prototypes Using Con-									
tanyakul07 Lim- tanyakul07 MonetteDD07 Monet-	straint and Integer Programming A Position-Based Propagator for the Open-Shop Problem									
teDD07 RossiTHP07	Replenishment Planning for Stochastic Inventory Systems									
RossiTHP07 RossiTHP07 BeniniBGM06	with Shortage Cost									
BeniniBGM06	Allocation, Scheduling and Voltage Scaling on Energy Aware MPSoCs									
GomesHS06 GomesHS06	Constraint Programming for Distributed Planning and Scheduling									
KhemmoudjPB06	When Constraint Programming and Local Search Solve									
KhemmoudjPB06	the Scheduling Problem of Electricité de France Nuclear Power Plant Outages									
KovacsV06 KovacsV06	Progressive Solutions: A Simple but Efficient Dominance Rule for Practical RCPSP									
LiuJ06 LiuJ06	LP-TPOP: Integrating Planning and Scheduling Through Constraint Programming									

		Table 2: Manual	ly Defined Pape	er Properties	.			
Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints
QuSN06 QuSN06	Using Constraint Programming to Achieve Optimal Prefetch Scheduling for Dependent Tasks on Run-Time Reconfigurable Devices							
AbrilSB05 AbrilSB05	Distributed Constraints for Large-Scale Scheduling Problems							
ArtiouchineB05 ArtiouchineB05 CarchraeBF05 CarchraeBF05	Inter-distance Constraint: An Extension of the All-Different Constraint for Scheduling Equal Length Jobs Methods to Learn Abstract Scheduling Models							
ChuX05 ChuX05	A Hybrid Algorithm for a Class of Resource Constrained Scheduling Problems							
DilkinaDH05 Dilki- naDH05	Extending Systematic Local Search for Job Shop Scheduling Problems							
FortinZDF05 Fort- inZDF05	Interval Analysis in Scheduling							
FrankK05 FrankK05	Mixed Discrete and Continuous Algorithms for Scheduling Airborne Astronomy Observations							
Geske05 Geske05	Railway Scheduling with Declarative Constraint Programming							
HebrardTW05 HebrardTW05	Computing Super-Schedules							
KovacsEKV05 Kovac- sEKV05	Proterv-II: An Integrated Production Planning and Scheduling System							
QuirogaZH05 QuirogaZH05	A Constraint Programming Approach to Tool Allocation and Resource Scheduling in FMS							
Vilim05 Vilim05	Computing Explanations for the Unary Resource Constraint							
WolfS05 WolfS05	$O(n \log n)$ Overload Checking for the Cumulative Constraint and Its Application							
WuBB05 WuBB05 cp-Hooker05 cp- Hooker05	Scheduling with Uncertain Start Dates Planning and Scheduling to Minimize Tardiness							
ArtiguesBF04 ArtiguesBF04	A New Exact Solution Algorithm for the Job Shop Prob- lem with Sequence-Dependent Setup Times							
HentenryckM04 HentenryckM04	Scheduling Abstractions for Local Search							
Hooker04 Hooker04 KovacsV04 KovacsV04	A Hybrid Method for Planning and Scheduling Completable Partial Solutions in Constraint Program-							
LimRX04 LimRX04	ming and Constraint-Based Scheduling Solving the Crane Scheduling Problem Using Intelligent							
	Search Schemes							
MaraveliasG04 MaraveliasG04	Using MILP and CP for the Scheduling of Batch Chemical Processes							
Sadykov04 Sadykov04	A Hybrid Branch-And-Cut Algorithm for the One- Machine Scheduling Problem							
Vilim04 Vilim04	$O(n \log n)$ Filtering Algorithms for Unary Resource Constraint							
VilimBC04 VilimBC04 VillaverdeP04	Unary Resource Constraint with Optional Activities An Investigation of Scheduling in Distributed Constraint							
VillaverdeP04 WolinskiKG04 Wolin-	Logic Programming A Constraints Programming Approach to Communication							
skiKG04 WolinskiKG04a Wolin-	Scheduling on SoPC Architectures A constraints programming approach to communication							
skiKG04a Wollii-	scheduling on SoPC architectures							

Table 2: Manually Defined Paper Properties									
Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	
DannaP03 DannaP03	Structured vs. Unstructured Large Neighborhood Search: A Case Study on Job-Shop Scheduling Problems with Earliness and Tardiness Costs								
Kumar03 Kumar03	Incremental Computation of Resource-Envelopes in Producer-Consumer Models								
OddiPCC03 Odd- iPCC03	Generating High Quality Schedules for a Spacecraft Memory Downlink Problem								
ValleMGT03 ValleMGT03	On Selecting and Scheduling Assembly Plans Using Constraint Programming								
Vilim03 Vilim03	Computing Explanations for Global Scheduling Constraints								
Wolf03 Wolf03 Bartak02 Bartak02	Pruning while Sweeping over Task Intervals Visopt ShopFloor: On the Edge of Planning and Scheduling								
Bartak02a Bartak02a	Visopt ShopFloor: Going Beyond Traditional Scheduling								
BeldiceanuC02	A New Multi-resource cumulatives Constraint with Neg-								
BeldiceanuC02 ElkhyariGJ02	ative Heights Conflict-Based Repair Techniques for Solving Dynamic								
ElkhyariGJ02 ElkhyariGJ02a	Scheduling Problems Solving Dynamic Resource Constraint Project Scheduling								
ElkhyariGJ02a HookerY02 HookerY02	Problems Using New Constraint Programming Tools A Relaxation of the Cumulative Constraint								
KamarainenS02 KamarainenS02	Local Probing Applied to Scheduling								
Muscettola02 Muscettola02	Computing the Envelope for Stepwise-Constant Resource Allocations								
Vilim02 Vilim02 ZhuS02 ZhuS02	Batch Processing with Sequence Dependent Setup Times A Meeting Scheduling System Based on Open Constraint Programming								
VanczaM01 VanczaM01 VerfaillieL01 Verfail- lieL01	A Constraint Engine for Manufacturing Process Planning Selecting and Scheduling Observations for Agile Satellites: Some Lessons from the Constraint Reasoning Community Point of View								
AngelsmarkJ00 Angels- markJ00	Some Observations on Durations, Scheduling and Allen's Algebra								
KorbaaYG99 KorbaaYG99	Solving transient scheduling problem for cyclic production using timed Petri nets and constraint programming								
CestaOS98 CestaOS98	Scheduling Multi-capacitated Resources Under Complex Temporal Constraints								
FrostD98 FrostD98	Optimizing with Constraints: A Case Study in Scheduling Maintenance of Electric Power Units								
GruianK98 GruianK98	Operation Binding and Scheduling for Low Power Using Constraint Logic Programming								
PembertonG98 PembertonG98	A constraint-based approach to satellite scheduling								
RodosekW98 RodosekW98	A Generic Model and Hybrid Algorithm for Hoist Scheduling Problems								
BaptisteP97 BaptisteP97	Constraint Propagation and Decomposition Techniques for Highly Disjunctive and Highly Cumulative Project Scheduling Problems								
BeckDF97 BeckDF97	Five Pitfalls of Empirical Scheduling Research								
BoucherBVBL97 BoucherBVBL97	Multi-criteria Comparison Between Algorithmic, Con- straint Logic and Specific Constraint Programming on a Real Schedulingt Problem								
Caseau97 Caseau97	Using Constraint Propagation for Complex Scheduling Problems: Managing Size, Complex Resources and Travel								

	Table 2: Manually Defined Paper Properties								
Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	
PapeB97 PapeB97	A Constraint Programming Library for Preemptive and Non-Preemptive Scheduling								
Colombani96 Colombani96	Constraint Programming: an Efficient and Practical Approach to Solving the Job-Shop Problem								
Zhou96 Zhou96 Goltz95 Goltz95	A Constraint Program for Solving the Job-Shop Problem Reducing Domains for Search in CLP(FD) and Its Appli-								
	cation to Job-Shop Scheduling								
Puget95 Puget95 Simonis95 Simonis95	Applications of Constraint Programming The CHIP System and Its Applications								
SimonisC95 SimonisC95 Touraivane95	Modelling Producer/Consumer Constraints Constraint Programming and Industrial Applications								
Touraivane95									
JourdanFRD94 JourdanFRD94	Data Alignment and Task Scheduling On Parallel Machines Using Concurrent Constraint Model-based Pro-								
AggounB92 AggounB92	gramming Extending CHIP in order to solve complex scheduling and								
	placement problems								
BaptisteLV92 BaptisteLV92	Hoist scheduling problem: an approach based on con- straint logic programming								
ErtlK91 ErtlK91	Optimal Instruction Scheduling using Constraint Logic Programming								
teLV92	straint logic programming Optimal Instruction Scheduling using Constraint Logic								

		Table 3: A	automatically Extra	cted Paper Propert	ies (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
AalianPG23 [1]	flow-shop, scheduling, resource, machine, transportation, pre- empt, make-span, order, activity		cumulative, noOverlap, endBeforeStart, cycle, alwaysIn		CPO, Cplex	steel cable	mining industry	real-world	
AbrilSB05 [3]	scheduling, distributed, multiagent, order		, ,			railway		http://	
Acuna-AgostMFG09 [4]	re-scheduling, scheduling, order, transportation					railway			
AkkerDH07 [370]	resource, make-span, sequence dependent setup, completion- time, precedence, cmax, order, due-date, preempt, release-date, machine, scheduling, lateness, job	RCPSP, parallel machine, single machine	$\operatorname{cumulative}$		Cplex				
AlesioNBG14 [99]	completion-time, job-shop, job, order, task, preempt, open-shop, activity, resource, scheduling, make-span, distributed		alldifferent		Cplex, OPL	automotive		http://, benchmark	
AngelsmarkJ00 [10]	task, job-shop, order, job, scheduling, resource								
AntuoriHHEN21 [11]	order, job, scheduling, transportation, resource, precedence, release-date, due-date, tardiness, machine, task, job-shop		cycle	Java, C++	Choco Solver, Gecode	automotive, car manufacturing	automotive industry	http://, sup- plementary material, gitlab, https://	
ArbaouiY18 [12]	completion-time, make-span, job, order, scheduling, resource, setup-time, machine, sequence dependent setup, cmax	single machine, parallel machine	noOverlap, alternative constraint, cumulative	C++	OZ, Cplex			benchmark, https://	
ArmstrongGOS21 [13]	completion-time, scheduling, cmax, transportation, sequence dependent setup, flow-shop, precedence, task, resource, job, preempt, job-shop, setup-time, make-span, order, machine	HFF	alternative constraint, diffn, circuit, cycle, cumulative, table constraint, bin-packing	Prolog, Java	Cplex, CHIP, CPO, Chuffed, SICStus, OZ, Gecode, MiniZ- inc	robot	packaging in- dustry	industrial part- ner, zenodo, real-world, benchmark, https://, sup- plementary material, in- dustry partner, instance genera- tor	energetic rea- soning
ArmstrongGOS22 [14]	completion-time, scheduling, cmax, transportation, flow-shop, task, resource, re-scheduling, job, make-span, order, machine	HFF, parallel machine	noOverlap, cu- mulative	Prolog	OPL, SICStus, OZ			real-world, benchmark, https://	
AronssonBK09 [15]	job-shop, task, order, job, trans- portation		cumulative	Prolog	CHIP, Cplex	railway		http://, real- life, real-world	sweep
ArtiguesBF04 [16]	completion-time, job, precedence, release-date, sequence dependent setup, setup-time, preempt, batch process, scheduling, job-shop, machine, cmax, order, resource, make-span		disjunctive	C++	Ilog Solver, Ilog Scheduler			benchmark	edge-finding
ArtiouchineB05 [18]	completion-time, preempt, make-span, release-date, re- source, re-scheduling, schedul- ing, job-shop, activity, order, precedence, machine, open-shop, job	parallel ma- chine, single machine	disjunctive, cu- mulative		Ilog Scheduler	aircraft		random instance, generated instance, http://	edge-finding, not-last, not- first

Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
	*	Classification		1 TogLanguages					Aigoritiiii
Astrand0F21 [20]	resource, scheduling, job, order, task, machine, activity, job-shop, precedence, make-span, open-		disjunctive, cy- cle		Gecode	satellite, agri- culture, farm- ing, robot,	mineral in- dustry, potash industry, mining	real-world, real- life, https://, benchmark,	
	shop					forestry	industry	generated in- stance	
AstrandJZ18 [21]	order, task, machine, activity, make-span, resource, scheduling	single machine	disjunctive, cu- mulative, cycle		Gecode	robot, hoist	potash industry	https://	time-tabling
Baptiste09 [25] BaptisteLV92 [30]	scheduling								
BaptisteP97 [28]	task, preempt, release-date, ac-	RCPSP	disjunctive, cu-	C++	Claire, CHIP			benchmark	edge-finder,
	tivity, re-scheduling, scheduling, job-shop, precedence, makespan, flow-shop, resource, duedate, job, order		mulative		, .				edge-finding
BarlattCG08 [31]	job-shop, job, flow-shop, setup- time, task, machine, resource, transportation, scheduling					pipeline, auto- motive		real-world	
Bartak02 [33]	precedence, make-span, ma- chine, activity, continuous- process, lateness, job-shop, resource, earliness, job, schedul- ing, task, order		disjunctive, cu- mulative	Prolog	SICStus, OZ	dairies		real-life, http://	edge-finding, time-tabling
Bartak02a [32]	make-span, machine, task, job, tardiness, job-shop, earliness, resource, activity, scheduling, rescheduling, precedence, order		disjunctive, cu- mulative		Ilog Scheduler	dairies		benchmark, http://, real-life	edge-finding, time-tabling
BartoliniBBLM14 [35]	task, scheduling, make-span, activity, job, machine, resource, tardiness		alternative con- straint, cumula- tive			super-computer		http://	
BarzegaranZP20 [36]	resource, distributed, scheduling, order, machine, task, rescheduling			Java	OR-Tools	automotive, robot		http://, https://	
BeckDF97 [37]	make-span, job, order, inventory, release-date, job-shop, machine, resource, due-date, activity, re-scheduling, scheduling, task, precedence	single machine	cycle, cumula- tive			robot		real-world, benchmark	edge-finding
BehrensLM19 [40]	task, multi-agent, machine, scheduling, make-span, dis- tributed, resource, setup-time, order			Python	OR-Tools, OZ, MiniZinc	robot		real-world, http://, https://, github	
BeldiceanuC02 [42]	machine, task, activity, pro- ducer/consumer, order, schedul- ing, resource	single machine	cumulative	Prolog	CHIP, OZ, SIC- Stus	crew-scheduling		real-life, bench- mark, random instance	sweep
BeldiceanuCP08 [44]	scheduling, order, task, resource		geost, disjunctive, cumulative	Prolog	SICStus, OPL, CHIP	rectangle- packing, perfect-square		benchmark	sweep, edg finding
BeldiceanuP07 [45]	order, release-date, scheduling, resource, due-date, preempt, task		disjunctive, cu- mulative			•			sweep
BenderWS21 [47]	order, activity, scheduling, resource, distributed, machine, job, task, preempt, make-span, setup-time	RCPSP	noOverlap	Python		agriculture		https://	

Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm	
	<u> </u>			FlogLanguages			Industries		Aigoritiiii	1
BenediktSMVH18 [49]	scheduling, job-shop, order, ma- chine, resource, job, preempt	parallel ma- chine, single machine	noOverlap		Gurobi, OZ	energy-price		generated in- stance, github, random in- stance, https://		
BeniniBGM06 [50]	distributed, setup-time, order, task, activity, resource, schedul- ing, tardiness, precedence, make- span		cycle, cumula- tive		Ilog Solver, ECLiPSe, CHIP, Cplex, OZ	automotive, pipeline		real-life		
BertholdHLMS10 [52]	job, completion-time, preempt, resource, scheduling, order, precedence	RCPSP, psplib	disjunctive, cu- mulative		Z3, Cplex			http://		
BessiereHMQW14 [53]	machine, scheduling, order, task, resource, job, setup-time		cycle, alldiffer- ent		Choco Solver	satellite	textile industry	real-life, http://, bench- mark		
BillautHL12 [54]	tardiness, job-shop, precedence, make-span, flow-shop, open-shop, resource, due-date, scheduling, job, cmax, setuptime, order, completion-time, release-date, machine	single machine	cycle		Cplex, Mistral			random instance		
Bit-Monnot23 [55]	activity, order, resource, scheduling, distributed, job, job-shop, machine, precedence, lazy clause generation, open-shop, makespan, task	OSP, Open Shop Schedul- ing Problem, RCPSP	disjunctive, cycle, cumulative		CPO, Mistral, OR-Tools, MiniZinc			https://, real- world, github, benchmark		
BofillCSV17 [57]	cmax, order, preempt, machine, activity, resource, lazy clause generation, scheduling, prece- dence, make-span	psplib, RCPSP	cumulative		Z3			http://, benchmark	energetic soning	rea
BofillEGPSV14 [58]	machine, task, lazy clause generation, order, scheduling				Cplex, MiniZ- inc, Gecode			industrial instance, http://	time-tabli	ng
BofillGSV15 [59]	order, machine, scheduling				Cplex			http://, indus- trial instance	time-tabli	ng
BogaerdtW19 [371]	tardiness, precedence, completion-time, job-shop, job, setup-time, order, machine, scheduling	parallel ma- chine, single machine	noOverlap	С	OPL, Cplex	railway		http://, benchmark, https://		
BonfiettiLBM11 [61]	resource, scheduling, job-shop, activity, order, precedence, ma- chine, task, job, make-span	RCPSP	cumulative, cycle		Ilog Solver	robot, hoist		industrial instance, gener- ated instance, http://, bench- mark		
BonfiettiLBM12 [62]	resource, distributed, scheduling, job-shop, activity, order, precedence, machine, job, makespan	RCPSP	cumulative, cy- cle		Ilog Solver	robot, hoist		http://, benchmark	time-tabli	ng
BonfiettiLM14 [63]	make-span, machine, task, job-shop, activity, order, job, scheduling, distributed, resource, open-shop, precedence	RCPSP, psplib	cumulative					real-world, benchmark, http://		
BonfiettiZLM16 [64]	resource, scheduling, activity, order, precedence, make-span	RCPSP	disjunctive, cy- cle, cumulative		CHIP, OR-Tools	${ m automotive}$	automotive in- dustry, control system industry	github, real- world, https://, generated instance, bench- mark, industrial instance	sweep, finder	edge

		Table 3: A	automatically Extra	cted Paper Propert	ies (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
BoothNB16 [65]	order, distributed, task, resource, activity, machine, scheduling, re-scheduling, precedence		cumulative, disjunctive, noOverlap	C++	Cplex	robot, medical		real-world	
BoudreaultSLQ22 [67]	precedence, lazy clause generation, transportation, task, scheduling, make-span, distributed, activity, machine, order, preempt, resource, cmax	RCPSP, OSP, EOSP, psplib	cumulative, dis- junctive		MiniZinc, CHIP, OR- Tools, OPL, Chuffed	offshore	ship repair in- dustry	supplementary material, real- life, https://, real-world, github, bench- mark, gitlab, generated instance, indus- trial partner	not-last, energetic reasoning, edge-finding, not-first
BurtLPS15 [70]	machine, scheduling, precedence, order, make-span, task, job, tardiness, completion-time, job- shop, resource	parallel ma- chine, single machine	cumulative, cy- cle		Gecode, Gurobi, Cplex, MiniZinc			real-world, benchmark, http://, indus- try partner	
CappartS17 [73]	task, re-scheduling, order, scheduling, resource, job-shop, machine, completion-time, activity, precedence, job	TMS	span constraint, alternative con- straint, cumula- tive, noOverlap		OZ, OPL	railway		real-life, ran- dom instance, bitbucket, https://	
CarchraeBF05 [74]	task, order, make-span, scheduling								
Caseau97 [75]	job-shop, resource, job, scheduling, task, preempt, make-span, order		cumulative			robot		benchmark	edge-finding
CauwelaertDMS16 [76]	batch process, precedence, task, completion-time, schedul- ing, make-span, activity, job, job-shop, machine, sequence dependent setup, setup-time, order, preempt, resource		cumulative, disjunctive	Java		container terminal		http://, https://, bench- mark, real-life, bitbucket	not-last, edge-finding, not-first
CestaOS98 [77] ChapadosJR11 [78]	resource, scheduling, job task, activity, order, scheduling		cycle, cumula-		OPL	robot	retail industry		time-tabling
	, ,,,,		tive				retair industry		time-tabling
ChuX05 [79]	release-date, due-date, completion-time, scheduling, machine, resource, order, job	single machine	disjunctive, cu- mulative		ECLiPSe				
CireCH13 [80]	job, tardiness, scheduling, task, order, make-span, machine, precedence, resource		cumulative, circuit		OPL, Cplex, OZ				
ClercqPBJ11 [81]	activity, resource, schedul- ing, precedence, distributed, completion-time, release-date, due-date, order		cumulative, alldifferent	Java	Choco Solver, CHIP			http://, benchmark	energetic reasoning, time- tabling, sweep, edge-finding
CobanH10 [82]	re-scheduling, scheduling, pre- empt, make-span, job, tardiness, distributed, order		disjunctive, cir- cuit		OPL, Cplex				
ColT19 [83]	precedence, job-shop, make- span, scheduling, machine, resource, order, job, earliness	JSSP	disjunctive, noOverlap	Java	OR-Tools, MiniZinc, CPO			real-world, https://, bench- mark, http://, github	
Colombani96 [84]	scheduling, job, task, preempt, release-date, due-date, job-shop, precedence, order, machine, ac- tivity, resource		disjunctive		СНІР			-	

		Table 3: A	Automatically Extra	cted Paper Propert	ies (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
DannaP03 [85] Davenport10 [87]	order, job-shop, machine, resource, activity, tardiness, scheduling, earliness, job earliness, scheduling, tardiness, resource, completion-time, release-date, due-date, order		disjunctive		Cplex, Ilog Scheduler, Ilog Solver Cplex	semiconductor		benchmark	
DavenportKRSH07 [88]	precedence, resource, scheduling, job-shop, make to order, se- quence dependent setup, setup- time, inventory, order, preempt, activity, job, machine		disjunctive, bin- packing	C++	Cplex, CHIP		steel industry		
DejemeppeCS15 [92]	resource, preempt, job-shop, precedence, sequence dependent setup, make-span, setup-time, order, job, tardiness, machine, task, completion-time, activity, release-date, scheduling	single machine	disjunctive, cycle, cumulative			container termi- nal		generated in- stance, http://, https://, bench- mark, real- world, bitbucket	edge-finding, not-first, not- last
DejemeppeD14 [93]	precedence, setup-time, activity, order, resource, scheduling, job, job-shop, make-span		cumulative			patient, medical		https://, bit- bucket	
DemirovicS18 [95]	precedence, scheduling, task, activity, order, resource		cumulative, dis- junctive		Gurobi, MiniZ- inc, OZ			real-world, https://, bench- mark, http://	time-tabling
DerrienP14 [97]	make-span, order, activity, scheduling, resource	CuSP, psplib	cumulative	Java	Choco Solver, CHIP			random instance	energetic rea- soning, edge- finding, sweep
DerrienPZ14 [98]	re-scheduling, precedence, job, make-span, order, machine, ac- tivity, resource, scheduling	RCPSP, CuSP	cumulative		Choco Solver, CHIP			http://, ran- dom instance, benchmark, real-world	sweep
DilkinaDH05 [100]	job-shop, precedence, make- span, order, machine, schedul- ing, job				OPL			http://	
DoomsH08 [102]	scheduling, job, task, order, job- shop, machine, resource, activ- ity, completion-time	RCPSP					services indus- try		
DoulabiRP14 [103]	activity, resource, due-date, scheduling, order, task	OSP	bin-packing		Cplex	medical, pa- tient, nurse			
EdisO11 [105]	flow-time, task, job, due-date, tardiness, make-span, lateness, activity, completion-time, re- source, scheduling, machine, pre- empt, earliness	parallel machine	bin-packing, cumulative, noOverlap		OPL, OZ, Cplex				
EfthymiouY23 [106]	order, scheduling, job, job- shop, machine, setup-time, re- scheduling, make-span, task	JSSP, CHSP	disjunctive, cy- cle, cumulative	Python	OPL, OR-Tools	satellite, pipeline, hoist, electroplating		https://, industrial instance, generated instance, bench- mark, random instance, real- life	
ElkhyariGJ02 [107]	task, activity, resource, scheduling, machine, precedence, pre- empt, due-date, re-scheduling, make-span	RCPSP	disjunctive, table constraint, cumulative						

Table 3: Automatically Extracted Paper Properties (Requires Local Copy)										
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm	
ElkhyariGJ02a [108]	order, scheduling, resource, open-shop, precedence, due- date, task, activity, re- scheduling	RCPSP, psplib	disjunctive, cu- mulative		OPL, OZ			real-life, http://, bench- mark	time-tabling	
ErtlK91 [109]	task, setup-time, resource, scheduling, machine, order		cycle	Prolog		pipeline		benchmark, real-world		
EvenSH15 [111]	scheduling, task, preempt, trans- portation, machine, distributed, order, resource, completion-time	SCC	cumulative, dis- junctive		Choco Solver, OPL			real-world, real- life, http://	sweep	
FontaineMH16 [117]	job-shop, precedence, scheduling, machine, completion-time, task, order, resource, make-span, job	parallel machine	disjunctive		MiniZinc, CHIP, Gurobi			https://, benchmark		
FortinZDF05 [118]	scheduling, temporal constraint reasoning, task, precedence, make-span, order, activity, resource	psplib						http://		
FrankK05 [119]	job, scheduling, task, order, precedence, due-date, resource	EOSP, OSP	cycle			satellite, air- craft		benchmark		
FrimodigS19 [121]	job-shop, order, task, machine, resource, scheduling, job		bin-packing, cu- mulative, regu- lar expression	Python	CHIP, Cplex, Gecode, OZ, MiniZinc	patient, nurse, radiation ther- apy, medical, physician		benchmark, real-world, https://		
FrohnerTR19 [122]	order, scheduling, distributed			Java, Python	MiniZinc, Gurobi, Gecode	nurse		benchmark, https://, real- world		
FrostD98 [123]	scheduling, order						power industry			
GalleguillosKSB19 [124]	distributed, job, resource, machine, order, re-scheduling, activity, make-span, scheduling	JSSP	cumulative, alternative constraint	Python	OZ, OR-Tools	super-computer, datacenter		http://, https://		
GarganiR07 [125]	order, inventory, resource, ma-		bin-packing	C++	OPL	steel mill	steel industry	real-life, http://		
GayHLS15 [128]	precedence, scheduling, task, order, make-span, resource, activity	OSP, RCPSP, psplib	cumulative, dis- junctive					benchmark, bit- bucket	edge-finding, time-tabling	
GayHS15 [129]	task, order, preempt, scheduling, precedence, resource		table constraint, disjunctive, cu- mulative		CHIP, OR- Tools, Gecode, Choco Solver			http://, bit- bucket, https://	time-tabling, sweep	
GaySS14 [131]	manpower, precedence, resource, job, job-shop, order, make-span, setup-time, activity, continuous-process, completion-time, scheduling, machine	OSP	disjunctive, cycle, cumulative			steel mill		real-life	sweep	
GeibingerKKMMW21 [133	distributed, scheduling	OSP			MiniZinc, Gecode, Cplex, OR-Tools, Gurobi	medical, nurse, physician, pa- tient, COVID	pharmaceutical industry	real-world, https://, http://		
GeibingerMM19 [135]	precedence, release-date, due-date, make-span, task, completion-time, activity, re- scheduling, order, job, schedul- ing, resource	RCPSP	noOverlap, cumulative, alternative constraint, endBeforeStart	Java	Cplex, MiniZ- inc, CPO, Gecode	automotive		generated in- stance, http://, real-world, https://, bench- mark, industrial partner, real-life	time-tabling	

		Table 3: A	Automatically Extra	cted Paper Propert	ies (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
GeibingerMM21 [136]	precedence, release-date, due- date, lazy clause generation, tardiness, machine, task, completion-time, activity, order, job, scheduling, resource	RCPSP	disjunctive, cu- mulative		Chuffed, Cplex, CPO	nurse		generated instance, real- world, github, benchmark, real-life	time-tabling
GeitzGSSW22 [137]	lazy clause generation, sequence dependent setup, job-shop, precedence, make-span, batch process, resource, transporta- tion, scheduling, job, setup-time, lateness, order, task, preempt, completion-time, machine, producer/consumer	RCPSP, single machine, JSSP	$\operatorname{cumulative}$		OPL, OZ	robot		http://, real-world, real-life, https://, github	sweep, not-last
GelainPRVW17 [138]	scheduling, order, resource							http://, real- life, benchmark	
Geske05 [139]	distributed, re-scheduling, task, job, job-shop, order, activity, resource, scheduling, machine, lateness		cumulative	Prolog	CHIP, SICStus	railway		real-life, http://	
GilesH16 [140]	transportation, setup-time, task, order, inventory, resource, activ- ity, scheduling		disjunctive, cu- mulative		Cplex	pipeline	chemical pro- cessing industry, petro-chemical industry, chemi- cal industry		
GodetLHS20 [143]	completion-time, make-span, setup-time, job, order, cmax, scheduling, resource, machine, release-date, lazy clause genera- tion, task	PMSP, sin- gle machine, parallel machine	bin-packing, disjunctive, cumulative, alldifferent		OZ, CHIP, Chuffed, Choco Solver	satellite	J	generated instance, bench- mark, https://, real-life, github	time-tabling, not-last
GoldwaserS17 [146]	machine, lazy clause generation, transportation, due-date, order, resource, scheduling	OSP	cumulative, dis- junctive	Python	Gecode, Gurobi	${ m torpedo}$	steel industry	github, instance generator, generated in- stance, http://, https://	
Goltz95 [147]	precedence, task, job, due-date, job-shop, order, completion- time, resource, scheduling, machine		disjunctive, cu- mulative	Prolog	СНІР			benchmark	edge-finding
GomesHS06 [148]	task, distributed, scheduling, multi-agent, order				Ilog Solver			real-life	
GrimesH10 [149]	task, job, job-shop, flow-shop, make-span, setup-time, open- shop, precedence, cmax, order, batch process, resource, ma- chine, scheduling, sequence de- pendent setup	Open Shop Scheduling Problem	cumulative, disjunctive, cycle		OZ		steel industry	benchmark	edge-finding, time-tabling
GrimesH11 [150]	task, job, tardiness, job-shop, earliness, flow-shop, lazy clause generation, make-span, completion-time, open-shop, precedence, cmax, order, due- date, resource, release-date, machine, scheduling	RCPSP	cumulative, dis- junctive		OZ, Ilog Solver, OPL, Cplex, Ilog Scheduler			benchmark, http://	edge-finding
GrimesHM09 [151]	precedence, open-shop, job, or- der, scheduling, resource, make- span, machine, task, job-shop	OSP, Open Shop Schedul- ing Problem	disjunctive	Java	Mistral, Ilog Scheduler, Choco Solver			benchmark	edge-finding, not-last

					ies (Requires Local	FJ/			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
GroleazNS20 [154]	tardiness, job-shop, precedence, order, resource, scheduling, in- ventory, job, setup-time, pre- empt, release-date, due-date, machine	GCSP	cumulative, cycle, circuit, noOverlap		CHIP, OR- Tools, CPO		food industry	benchmark, industrial in- stance, https://	
GruianK98 [155]	activity, re-scheduling, order, re- source, scheduling, task		cycle, circuit, diffn, cumula- tive		OPL, CHIP	pipeline, air- craft		benchmark	
GuSS13 [156]	distributed, scheduling, ma- chine, resource, order, activity, lazy clause generation, prece- dence, make-span	RCPSPDC, single machine, RCPSP	cumulative					benchmark	time-tabling, edge-finder, edge-finding
HanenKP21 [159]	machine, scheduling, precedence, cmax, order, make-span, release- date, lateness, task, job, tardi- ness, completion-time, job-shop, due-date, preempt, resource	parallel ma- chine, CuSP, RCPSP	$\operatorname{cumulative}$	Python	Claire	pipeline		generated instance, https://, random instance	energetic rea soning
He0GLW18 [161]	multi-agent, distributed, order, machine, re-scheduling, schedul- ing, precedence, transportation			Python	Gurobi	real-time pric- ing, energy- price		real-world, bit- bucket, http://, https://	
HebrardTW05 [162]	job-shop, job, order, machine, scheduling								
HechingH16 [163]	scheduling, task, re-scheduling, job, order, manpower	OSP	circuit, noOver- lap		OZ, OPL, Cplex, CHIP	medical, patient		real-world	
HeinzB12 [164]	precedence, earliness, job, order, release-date, machine, resource, due-date, activity, completion- time, tardiness, scheduling	single machine, PTC	cumulative, cy- cle, alternative constraint		Ilog Scheduler, CHIP, Ilog Solver, OPL, Cplex				
HeinzKB13 [165]	job-shop, order, resource, release-date, machine, schedul- ing, job, tardiness	single machine, PTC	cumulative		OPL, Cplex				
HeinzS11 [167]	job, order, machine, resource, completion-time, scheduling, preempt	RCPSP, psplib	cumulative, disjunctive		CHIP, Cplex			benchmark, http://	time-tabling, energetic rea soning
HentenryckM04 [172]	activity, job, scheduling, resource, open-shop, precedence, due-date, make-span, order, tardiness, machine, task, job-shop, completion-time		disjunctive, cy- cle, cumulative					benchmark	
HentenryckM08 [173] HermenierDL11 [174]	order order, scheduling, distributed, machine, task, completion-time, producer/consumer, resource, precedence	FJS	bin-packing cumulative, table constraint, bin-packing, all different, disjunctive, cycle		OZ, Choco Solver	steel mill datacenter		http://	
HillTV21 [175]	flow-shop, machine, activity, lazy clause generation, resource, job, scheduling, task, preempt, order, precedence, release-date, make-span	single machine, RCPSP, psplib	alternative con- straint, cumula- tive, cycle					https://, real-world	
HoeveGSL07 [373]	order, multi-agent, scheduling, resource, distributed, task, re-scheduling, job-shop, prece- dence, job, machine		$\operatorname{disjunctive}$		Ilog Scheduler, Cplex			benchmark, http://	edge-finding

		Table 3: A	Automatically Extra	cted Paper Propert	ies (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
Hooker04 [177]	make-span, distributed, order, release-date, machine, resource, tardiness, scheduling, task, precedence		cumulative, dis- junctive, circuit		OPL, Cplex, Ilog Scheduler			random instance	
Hooker17 [181]	due-date, job, order, resource, scheduling, tardiness		circuit		OZ			benchmark, ran- dom instance	
HookerY02 [182]	job, machine, order, resource, scheduling	RCPSP	cumulative, dis- junctive					http://	
HoundjiSWD14 [183]	due-date, inventory, machine, order, precedence, resource, scheduling, transportation	single machine	circuit					bitbucket, generated in- stance, http://, https://	
IfrimOS12 [185]	distributed, due-date, job, ma- chine, order, re-scheduling, re- source, scheduling, task		disjunctive			datacenter, energy-price		http://, real-life	
JuvinHHL23 [188]	cmax, completion-time, due- date, flow-shop, job, job-shop, machine, make-span, order, precedence, preempt, resource, scheduling, setup-time, task	JSSP, PJSSP, parallel machine	alldifferent, cumulative, disjunctive, endBeforeStart, noOverlap	C++	CPO, Mistral			benchmark, github, http://, https://, sup- plementary material	edge-finding, not-first, not- last
JuvinHL23 [189]	cmax, completion-time, flow- shop, job, job-shop, machine, make-span, order, precedence, scheduling, setup-time, tardi- ness, task		endBeforeStart, noOverlap		CPO, Cplex			https://, real-world	
KamarainenS02 [190]	activity, earliness, job, job-shop, machine, order, precedence, preempt, resource, scheduling, transportation	KRFP			ECLiPSe			benchmark, http://, real- world	
KameugneFGOQ18 [192]	cmax, completion-time, make- span, order, precedence, re- source, scheduling, task	CuSP, RCPSP	cumulative, disjunctive	Java	CHIP, Choco Solver			benchmark, http://, https://, real- world	energetic rea- soning, not- first, not-last, sweep, time- tabling
KameugneFND23 [193]	cmax, completion-time, lazy clause generation, machine, make-span, order, precedence, preempt, resource, scheduling, task	CTW, CuSP, RCPSP, psplib	cumulative, dis- junctive	Java	CHIP, Choco Solver			benchmark, http://, https://	edge-finder, edge-finding, energetic rea- soning, not- first, not-last, sweep, time- tabling
KameugneFSN11 [194]	completion-time, job, job-shop, make-span, order, precedence, preempt, release-date, resource, scheduling, task	CuSP, RCPSP, psplib	cumulative, dis- junctive		Gecode			benchmark, http://	edge-finding, not-first, not- last, time- tabling
KelarevaTK13 [197]	activity, inventory, lazy clause generation, make-span, order, precedence, re-scheduling, re- source, scheduling, setup-time, tardiness, task, transportation	BPCTOP, Bulk Port Cargo Throughput Optimisation Problem, LS- FRP, Liner Shipping Fleet Repositioning Problem	alldifferent		Cplex, MiniZ-inc, OZ	earth observa- tion, satellite		http://, real- world	· ·

		Table 5. A	Automaticany Extra	cted raper rropert	ies (Requires Local	Сору)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
KeriK07 [199]	activity, cmax, due-date, ear- liness, job, job-shop, make- span, order, precedence, re- source, scheduling, tardiness, temporal constraint reasoning	RCPSP	cycle	C++				http://	edge-finding
KhemmoudjPB06 [201]	distributed, order, resource, scheduling, stock level		cumulative, cy-	C++	CHIP			real-world	
KimCMLLP23 [202]	distributed, due-date, earliness, job, job-shop, machine, make- span, open-shop, order, prece- dence, scheduling, setup-time, tardiness, transportation	SCC, parallel machine	noOverlap	Python	Gurobi, OR- Tools		steel industry	benchmark, https://, real- world, zenodo	
KlankeBYE21 [203]	activity, batch process, completion-time, due-date, job, job-shop, machine, make-span, order, producer/consumer, rescheduling, resource, scheduling, task		circuit, cumu- lative, disjunc- tive, noOverlap	Python	CHIP, Cplex, Gurobi, OR- Tools		food-processing industry	benchmark, https://, ran- dom instance, real-life	
KletzanderM17 [204]	machine, order, resource, scheduling, transportation	parallel machine			OZ	torpedo	steel industry	http://	
KorbaaYG99 [206]	flow-shop, job, job-shop, ma- chine, make-span, order, re- source, scheduling, task, trans- portation		circuit, cycle	Prolog	CHIP, Ilog Solver, OZ	hoist, robot			
KoschB14 [208]	batch process, cmax, completion-time, distributed, due-date, job, job-shop, lateness, machine, make-span, multi-agent, order, release-date, resource, scheduling	RCPSP, single machine	bin-packing, cumulative, disjunctive	Java	Choco Solver, Cplex, OZ	semiconductor		benchmark	
KovacsEKV05 [211]	job, job-shop, precedence, resource, scheduling, setup-time							real-life	
KovacsTKSG21 [215]	distributed, due-date, flow- shop, inventory, job, job-shop, machine, order, precedence, preempt, re-scheduling, release- date, resource, scheduling, tardiness, task	RCPSP, single machine	$\operatorname{cumulative}$		Cplex, Gurobi, OR-Tools			benchmark, github, http://, https://, real- world, sup- plementary material	
KovacsV04 [213]	job, job-shop, machine, make- span, order, precedence, re- source, scheduling, task	single machine	cumulative, dis- junctive		Ilog Scheduler			benchmark, http://, indus- trial partner, real-life	edge-finding
KovacsV06 [214]	earliness, job, job-shop, machine, make-span, order, precedence, resource, scheduling, setup-time, tardiness, task	RCPSP, single machine	cumulative		Ilog Scheduler	automotive		benchmark, generated instance, indus- trial partner	
KreterSS15 [216]	activity, completion-time, lazy clause generation, machine, make-span, order, preempt, resource, scheduling, task	OSP, RCPSP, parallel machine	cumulative, diffn		CHIP, Chuffed, Cplex, MiniZinc			benchmark, http://	
KrogtLPHJ07 [372]	activity, due-date, inventory, job, job-shop, machine, order, precedence, resource, scheduling		circuit	Prolog	OPL	aircraft, semi- conductor		real-world	
Kumar03 [219]	activity, order, pro- ducer/consumer, resource, scheduling		cycle						bi-partite matching, max-flow

					ies (Requires Local	107				
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm	
Laborie09 [220]	activity, due-date, earliness, inventory, job, job-shop, machine, order, precedence, preempt, release-date, resource, scheduling, sequence dependent setup, setup-time, tardiness, task		alternative constraint, cumulative, disjunctive, endBeforeStart, noOverlap	C	CPO, OPL, OZ	aircraft, satellite		benchmark, http://, real- world		
Laborie18a [221]	due-date, job, machine, precedence, release-date, resource, scheduling, task		alternative constraint, cumulative		CPO, Ilog Scheduler, OPL			benchmark, http://, https://, real- life, real-world	energetic soning	rea
LacknerMMWW21 [223]	batch process, due-date, earliness, flow-shop, job, lateness, machine, make-span, order, release-date, scheduling, setuptime, tardiness, task	OSP, parallel machine, single machine	cumulative, endBeforeStart, noOverlap		CPO, Chuffed, Cplex, Gurobi, MiniZinc, OPL, OR-Tools, OZ	oven scheduling, semiconductor	electronics industry, man- ufacturing industry, steel industry	benchmark, https://, indus- trial partner, instance genera- tor, random in- stance, real-life, supplementary material		
LahimerLH11 [225]	cmax, completion-time, job, machine, make-span, order, precedence, preempt, resource, scheduling, task	RCPSP, parallel machine	disjunctive	C++	Ilog Scheduler			benchmark, http://	energetic soning	rea-
LauLN08 [226]	distributed, flow-shop, inventory, job, job-shop, machine, order, resource, scheduling, transporta- tion							benchmark, real-world		
LetortBC12 [228]	machine, make-span, order, precedence, resource, schedul- ing, task	psplib	bin-packing, cu- mulative, geost	Java, Prolog	CHIP, Choco Solver, SICStus	datacenter		benchmark, http://, random instance	edge-findin sweep	g,
LetortCB13 [229]	machine, make-span, order, precedence, resource, schedul- ing, task	RCPSP, psplib	bin-packing, cumulative, disjunctive	Java, Prolog	Choco Solver, SICStus			benchmark, http://, random instance	edge-findin energetic soning, swe	rea-
LiFJZLL22 [231]	batch process, buffer-capacity, completion-time, distributed, flow-shop, flow-time, job, job- shop, machine, make-span, order, scheduling, setup-time, tardiness, task, transportation	single machine	·		OPL, OZ	${f robot}$		benchmark	U'	
LimBTBB15 [235]	earliness, job, job-shop, machine, multi-agent, order, rescheduling, scheduling, tardiness				OPL	HVAC		benchmark, http://	time-tablin	g
LimHTB16 [234]	activity, distributed, machine, multi-agent, order, re-scheduling, scheduling		cumulative		OPL	HVAC, energy- price, real-time pricing		http://, real- world		
LimRX04 [233]	completion-time, job, machine, order, preempt, scheduling, transportation				OZ	container termi- nal		generated in- stance		
Limtanyakul07 [236]	due-date, job, machine, make- span, order, precedence, release- date, resource, scheduling, task		cumulative		OPL	robot		real-life	energetic soning	rea-
LiuCGM17 [239]	activity, cmax, machine, order, scheduling, task, transportation			Python	MiniZinc, OPL, OR-Tools		tourism indus- try	github, http://, https://		
LiuJ06 [240]	make-span, order, resource, scheduling, task		cycle, disjunc- tive		220 20010					
LiuLH19 [238]	order, resource, scheduling				Choco Solver, OZ			benchmark, https://	time-tablin	g

Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
LombardiBM15 [241]	activity, completion-time, distributed, job, job-shop, machine, make-span, order, precedence, resource, scheduling, task	JSSP, RCPSP, psplib			•			benchmark, real-world	-
LombardiBMB11 [242]	activity, completion-time, ma- chine, make-span, order, prece- dence, resource, scheduling, task	RCPSP	cumulative, cy- cle	C++		hoist		benchmark, industrial in- stance, real-life	
LombardiM09 [243]	activity, completion-time, make- span, order, precedence, pre- empt, resource, scheduling, task	RCPSP			CHIP, Ilog Solver			instance genera- tor, real-world	
LombardiM10 [244]	activity, completion-time, make- span, order, precedence, re- source, scheduling, task	RCPSP	cumulative, dis- junctive		Ilog Solver			benchmark, real-world	
Madi-WambaB16 [251]	job, order, precedence, resource, scheduling, task		cumulative	Java	CHIP, Choco Solver			benchmark, generated in- stance, http://, https://, ran- dom instance, real-world	
Madi- WambaLOBM17 [252]	activity, distributed, job, ma- chine, order, precedence, re- scheduling, resource, scheduling, task		bin-packing, cu- mulative	Prolog	SICStus	datacenter		real-world	sweep
MakMS10 [253]	activity, due-date, inventory, job, machine, order, precedence, resource, scheduling, task, trans- portation		cycle						
MalapertN19 [254]	cmax, completion-time, flow- time, job, machine, make-span, order, resource, scheduling, se- quence dependent setup, setup- time, task	PMSP, PTC, parallel ma- chine, single machine	alternative constraint, alwaysIn, cumulative, noOverlap		CPO, Cplex	${f semiconductor}$		benchmark, generated in- stance, http://, https://, indus- trial instance	
MaraveliasG04 [257]	1	IGGD II I		D 41	OZ	COMP		1 //	
Mehdizadeh- Somarin23 [260]	cmax, completion-time, flow- shop, job, job-shop, machine, make-span, multi-agent, or- der, precedence, preempt, re-scheduling, scheduling, setup- time, tardiness, task	JSSP, parallel machine, single machine		Python	Cplex, OZ	COVID, robot		https://, ran- dom instance	
MelgarejoLS15 [6]	job, machine, order, precedence, resource, scheduling, setup-time, tardiness, task, transportation	single machine	alldifferent, circuit, disjunc- tive, noOverlap, table constraint		Cplex, OZ			benchmark, http://, real- world	
Mercier- AubinGQ20 [263]	activity, completion-time, due- date, earliness, job, job-shop, lazy clause generation, machine, make-span, order, precedence, preempt, resource, scheduling, sequence dependent setup, setup-time, tardiness, task	RCPSP	circuit, cumula- tive, cycle, dis- junctive	C++, Python	MiniZinc, OPL		manufacturing industry, textile industry	http://, https://, indus- trial instance, industrial part- ner	
MonetteDD07 [265]	completion-time, job, job- shop, machine, make-span, no preempt, open-shop, order, precedence, preempt, resource, scheduling, task	OSP, Open Shop Schedul- ing Problem	$\operatorname{disjunctive}$		Gecode			benchmark	edge-finding, not-first, not last

		Table 3: A	Automatically Extra	cted Paper Propert	ies (Requires Local	Сору)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
MonetteDH09 [266]	activity, completion-time, distributed, due-date, earli- ness, job, job-shop, machine, make-span, order, precedence, preempt, release-date, resource, scheduling, tardiness, task		cumulative, cycle, disjunctive					benchmark	not-last
MossigeGSMC17 [269]	activity, completion-time, distributed, job, job-shop, machine, make-span, order, precedence, preempt, resource, scheduling, task	FJS, RCPSP, single machine	cumulative, cy- cle, disjunctive	Prolog	CHIP, SICStus	rectangle- packing, robot		benchmark, generated in- stance, http://, industrial part- ner, random instance, real- world	
MouraSCL08 [271]	activity, distributed, inventory, order, precedence, preempt, re- source, scheduling, transporta- tion		cycle, disjunc- tive, table constraint	C++	Ilog Scheduler, Ilog Solver, OZ	pipeline			max-flow
MouraSCL08a [270]	distributed, due-date, inventory, order, re-scheduling, resource, scheduling, transportation		cumulative, dis- junctive	C++	Ilog Scheduler, Ilog Solver	pipeline		benchmark, real-world	
MurinR19 [273]	activity, completion-time, job, job-shop, machine, make-span, order, precedence, resource, scheduling, setup-time, task, transportation	JSPT	alternative constraint, end- BeforeStart, noOverlap		Cplex, OPL	patient, robot		benchmark, github, https://, real- life	
MurphyMB15 [274]	activity, machine, order, rescheduling, resource, scheduling, task		circuit, cumula- tive, cycle, dis- junctive	Java	CHIP, Choco Solver			http://, real- world	
Muscettola02 [275]	activity, cmax, job, job-shop, order, precedence, resource, scheduling		cycle					http://	edge-finding, max-flow
NattafM20 [278]	completion-time, flow-time, job, machine, make-span, order, re- source, scheduling, setup-time	PMSP, PTC, parallel ma- chine, single machine	cumulative, noOverlap		CPO, Cplex	semiconductor		benchmark, http://, https://, indus- trial instance	
NishikawaSTT18 [280]	activity, distributed, make-span, order, precedence, resource, scheduling, task		alternative con- straint, endBe- foreStart		Cplex, OZ	pipeline, robot		benchmark, https://, real- world	
NishikawaSTT18a [281]	activity, distributed, make-span, order, precedence, re-scheduling, resource, scheduling, task		alternative con- straint, endBe- foreStart		Cplex, OZ	nurse, pipeline, robot		benchmark, https://, real- life, real-world	
OddiPCC03 [288]	activity, completion-time, distributed, machine, order, precedence, preempt, resource, scheduling, task	single machine	cycle	Java		earth observa- tion, satellite		benchmark, http://	
OuelletQ13 [289]	completion-time, make-span, or- der, precedence, preempt, re- source, scheduling, task	CuSP, RCPSP, psplib	cumulative, dis- junctive		CHIP, Choco Solver			benchmark, http://	edge-finder, edge-finding, energetic re soning, no first, not-las sweep, tim tabling

		Table 5: A	Automaticany Extra	cted raper rropert	ies (Requires Local	Сору)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
OuelletQ18 [290]	completion-time, make-span, order, precedence, resource, scheduling, task	RCPSP, psplib	cumulative, dis- junctive	Java	CHIP, Choco Solver, OZ			benchmark, https://	edge-finding, energetic rea- soning, not- first, not-last time-tabling
OuelletQ22 [291]	activity, completion-time, lazy clause generation, order, pre- empt, resource, scheduling, task		cumulative, dis- junctive	Java	CHIP, Choco Solver, MiniZinc	nurse		benchmark, github, https://, ran- dom instance	edge-finding, energetic rea- soning, not- first, not-last sweep, time- tabling
OujanaAYB22 [292]	batch process, buffer-capacity, completion-time, distributed, due-date, flow-shop, job, job-shop, machine, make to order, make-span, open-shop, order, precedence, preempt, resource, scheduling, sequence dependent setup, setup-time, tardiness, task	FJS, HFF, PMSP, parallel machine	disjunctive, noOverlap, span constraint		CPO, OPL	COVID, robot	food industry, steel industry	benchmark, https://, indus- trial instance, real-life, real- world	
ParkUJR19 [297]	cmax, completion-time, distributed, due-date, flow-shop, flow-time, job, job-shop, lateness, machine, make-span, no preempt, open-shop, order, preempt, resource, scheduling, tardiness, task	parallel ma- chine, single machine	cycle, endBefor- eStart, noOver- lap					https://, real-world	
PerezGSL23 [299]	activity, completion-time, inventory, machine, make-span, order, re-scheduling, resource, scheduling, task, transportation	OSP	cumulative, ta- ble constraint		OPL	container termi- nal, nurse, steel mill		generated instance, real- world	
PesantRR15 [301]	activity, lazy clause generation, order, scheduling, transportation		cumulative, ta- ble constraint		Gecode, Gurobi, Ilog Solver			http://	
PopovicCGNC22 [307]	activity, completion-time, machine, make-span, order, resource, scheduling, task, transportation	TMS	alwaysIn, cumu- lative, noOver- lap	C++, Prolog	CHIP, Cplex, OZ, SICStus	pipeline	electricity in- dustry	https://	
PovedaAA23 [309]	activity, job, job-shop, lazy clause generation, make-span, order, precedence, preempt, release-date, resource, schedul- ing, task	OSP, RCPSP	cumulative, dis- junctive	Python	CPO, Chuffed, Cplex, MiniZinc	aircraft, auto- motive		benchmark, github, https://, in- dustrial in- stance, real-life, real-world	
Pralet17 [310]	activity, due-date, job, job-shop, machine, make-span, order, precedence, resource, schedul- ing, sequence dependent setup, setup-time	JSSP, OSP, RCPSP, psplib	cumulative, cy- cle, disjunctive		CHIP, CPO, Cplex	satellite		benchmark, http://	
PraletLJ15 [311]	activity, due-date, job, job-shop, make-span, order, precedence, resource, scheduling, tardiness, task	JSSP, OSP	alternative constraint, cycle, noOverlap		CPO, Cplex	earth observa- tion, satellite			
Puget95 [313]	activity, job, job-shop, man- power, order, resource, schedul- ing, task, transportation	OSP	disjunctive		OPL			benchmark	

					ies (Requires Local	- 107			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
QuSN06 [316]	distributed, precedence, resource, scheduling, task		circuit	Prolog	SICStus				
QuirogaZH05 [317]	activity, completion-time, due- date, earliness, flow-shop, flow- time, inventory, machine, make- span, order, precedence, release- date, resource, scheduling, tardi- ness, task				ECLiPSe, Ilog Scheduler, Ilog Solver, OPL, OZ	robot			
RendlPHPR12 [318]	job, machine, order, re- scheduling, scheduling, trans- portation			Java	OZ	medical, nurse, patient		benchmark, http://, real- world	
RodosekW98 [320]	activity, job, machine, make- span, order, resource, schedul- ing, task, transportation		circuit, cycle, disjunctive	Prolog	CHIP, Cplex, ECLiPSe, OPL	electroplating, hoist		benchmark	
RossiTHP07 [321]	distributed, inventory, order, resource, scheduling, stock level		cumulative, cy- cle		Choco Solver, OPL				
Sadykov04 [323]	completion-time, due-date, job, lateness, machine, precedence, preempt, release-date, schedul- ing, task	parallel ma- chine, single machine	disjunctive						edge-finding
SchuttCSW12 [328]	activity, lazy clause generation, make-span, order, precedence, preempt, resource, scheduling	OSP, RCPSP, RCPSPDC	cumulative		CHIP			benchmark, http://	
SchuttFS13 [330]	activity, completion-time, job, job-shop, lazy clause generation, machine, make-span, order, precedence, resource, scheduling, task	FJS, OSP, RCPSP, RCP- SPDC	alternative constraint, cumulative, dis- junctive, span constraint		MiniZinc			benchmark, http://	energetic rea soning, time tabling
SchuttFSW09 [331]	activity, job, lazy clause generation, machine, make-span, open- shop, order, precedence, pre- empt, resource, scheduling, task	RCPSP, psplib	cumulative, dis- junctive		CHIP, ECLiPSe, OZ, SICStus			$\begin{array}{ll} {\rm benchmark,} \\ {\rm http://,} & {\rm real-} \\ {\rm world} \end{array}$	edge-finder
SchuttS16 [333]	activity, inventory, lazy clause generation, machine, make-span, manpower, order, precedence, preempt, producer/consumer, resource, scheduling	OSP, RCPSP	$\operatorname{cumulative}$		Chuffed, Ilog Scheduler, MiniZinc, OPL			benchmark, http://	
SchuttW10 [334]	activity, due-date, lazy clause generation, make-span, order, preempt, release-date, resource, scheduling, task	CuSP, RCPSP, psplib	cumulative, dis- junctive	Java	СНІР	rectangle- packing		benchmark	edge-finding, not-first, not last
SerraNM12 [335]	activity, inventory, machine, order, precedence, preempt, release-date, resource, schedul- ing	OSP	alwaysIn, cumulative, cycle		Cplex, OPL			benchmark, http://, real- world	
SialaAH15 [340]	cmax, earliness, job, job-shop, lazy clause generation, machine, make-span, open-shop, order, precedence, resource, scheduling, setup-time, tardiness, task	JSSP, RCPSP	cumulative, dis- junctive		Mistral			benchmark, github, http://	edge-finding
SimoninAHL12 [341]	activity, order, precedence, pre- empt, resource, scheduling, task	OSP	cumulative, cy- cle, disjunctive, span constraint		CHIP	satellite			sweep
Simonis95 [343]	machine, order, precedence, producer/consumer, resource, scheduling, task, transportation		circuit, cumula- tive, cycle, diffn	Prolog	CHIP	aircraft	food industry		

		Table 3: A	Automatically Extra	cted Paper Propert	ies (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
SimonisC95 [345]	batch process, continuous- process, due-date, flow-shop, inventory, job, job-shop, ma- chine, manpower, order, pro- ducer/consumer, resource, scheduling, stock level, task, transportation		cumulative, diffn	Prolog	CHIP, OZ	aircraft, pipeline	food industry	real-life	
SquillaciPR23 [346]	activity, distributed, multiagent, order, resource, scheduling, task	EOSP, Earth Observation Scheduling Problem, OSP	noOverlap	Python	Cplex	earth observation, earth orbit, satellite		benchmark, github, https://	
SunLYL10 [349]	distributed, order, scheduling, task	,	cycle		Cplex, OPL	automotive		http://, https://	
SzerediS16 [351]	activity, lazy clause genera- tion, machine, make-span, order, precedence, preempt, resource, scheduling, task	RCPSP, psplib	cumulative		Chuffed, Cplex, Gecode, MiniZ- inc			benchmark, http://	
TangB20 [352]	batch process, due-date, flow- shop, job, machine, make-span, order, precedence, resource, scheduling, tardiness	2BPHFSP, OSP, single machine	alwaysIn, bin- packing, cycle, endBeforeStart, span constraint	Java	CPO, Cplex	semiconductor	manufacturing industry	https://, real- world	
TardivoDFMP23 [354]	activity, lazy clause generation, make-span, order, precedence, preempt, resource, scheduling, task	CuSP, RCPSP, psplib	cumulative, disjunctive	C++	CHIP, Gecode, MiniZinc			benchmark, bit- bucket, github, https://, real- world	edge-finding, energetic rea- soning, not- first, not-last, sweep, time- tabling
TasselGS23 [355]	completion-time, flow-shop, flow-time, job, job-shop, ma- chine, make-span, order, prece- dence, preempt, re-scheduling, resource, scheduling, tardiness, task	JSSP	cumulative, disjunctive, noOverlap	Java	Choco Solver			benchmark, github, https://, indus- trial instance, real-world, supplementary material	J
Tesch16 [359]	completion-time, job, make- span, order, precedence, re- source, scheduling	CuSP, RCPSP, psplib	cumulative, dis- junctive	C++	OPL			http://	edge-finding, energetic rea- soning, not- first, not-last, sweep, time- tabling
Tesch18 [360]	completion-time, due-date, job, lateness, machine, make-span, order, precedence, preempt, release-date, resource, schedul- ing, task	CuSP, RCPSP, psplib, single machine	$\operatorname{cumulative}$					https://	edge-finding, energetic rea- soning, not-last, sweep, time- tabling
ThiruvadyBME09 [361]	due-date, job, machine, make- span, open-shop, order, resource, scheduling, setup-time, tardiness	single machine	cumulative	C++	Gecode			http://	
Tom19 [363]	activity, job, job-shop, machine, make-span, re-scheduling, resource, scheduling, tardiness, task, transportation	single machine		Java	OPL, OZ			real-world	
Touraivane95 [366]	order, scheduling, task			Prolog		crew-scheduling		real-life	

		Table 5. F	Automaticany Extra	cted Laper Liopert	ies (Requires Local	Сору)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
ValleMGT03 [369]	job, job-shop, machine, make- span, order, precedence, re- source, scheduling, task, trans- portation				Ilog Solver	robot		http://, real-life	edge-finder
VanczaM01 [374]	machine, order, precedence, resource, scheduling, task		cycle, disjunc- tive		OZ	robot		http://, real- life, real-world	
VerfaillieL01 [375]	job, job-shop, open-shop, order, scheduling, task	Open Shop Scheduling Problem	cycle		Cplex, OPL	earth observa- tion, satellite		http://	
Vilim02 [376]	activity, batch process, precedence, resource, scheduling, sequence dependent setup, setuptime		cumulative, dis- junctive						edge-finding
Vilim03 [377]	job, job-shop, open-shop, order, scheduling		cumulative, dis- junctive						edge-finding, not-last
Vilim04 [378]	activity, batch process, completion-time, job, job-shop, machine, order, precedence, resource, scheduling, sequence dependent setup, setup-time, task		cumulative, dis- junctive					benchmark, http://	edge-finding, not-last, sweep
Vilim05 [379]	activity, completion-time, job, job-shop, machine, make-span, open-shop, order, precedence, preempt, resource, scheduling, task		cumulative, dis- junctive	C++				benchmark, http://	not-last
Vilim09 [380]	activity, completion-time, job, job-shop, order, precedence, preempt, resource, scheduling		cumulative, cy- cle		CPO			http://	edge-finding, energetic re soning, no first, not-last
Vilim11 [382]	activity, completion-time, machine, manpower, order, precedence, preempt, resource, scheduling, task	RCPSP, psplib	cumulative, cy- cle, disjunctive					benchmark, http://	edge-finding, energetic re soning, not-las sweep, tim tabling
VilimBC04 [383]	activity, completion-time, dis- tributed, job, job-shop, machine, make-span, open-shop, order, precedence, resource, scheduling		cumulative, dis- junctive					benchmark, http://, real-life	edge-finding, not-first, no last
VilimLS15 [385]	activity, cmax, completion-time, earliness, job, job-shop, machine, make-span, order, precedence, resource, scheduling, task	RCPSP, psplib	cumulative, disjunctive, noOverlap		CPO, Cplex, OZ	rectangle- packing		benchmark, http://	time-tabling
WangB20 [390]	distributed, job, machine, order, resource, scheduling, task	FJS, Fixed Job Scheduling	alldifferent		Gurobi, OZ	aircraft		github, http://, https://	
WangB23 [391]	job, lazy clause generation, or- der, resource, scheduling, task, transportation	FJS, Fixed Job Scheduling, OSP	alldifferent		Gurobi	aircraft, crew- scheduling		http://, ran- dom instance, real-world	
WatsonB08 [393]	cmax, completion-time, job, job- shop, machine, make-span, or- der, resource, scheduling		disjunctive	C++	Ilog Scheduler			benchmark, real-world	
WessenCS20 [394]	completion-time, job, job-shop, make-span, multi-agent, order, precedence, scheduling, task		circuit		Gecode, OZ	robot		http://, https://, real- world	

		Table 3: A	Automatically Extra	cted Paper Propert	ies (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
WinterMMW22 [396]	completion-time, distributed, due-date, job, machine, order, precedence, release-date, re- source, scheduling, setup-time, tardiness, task	PMSP, parallel machine	alternative constraint, noOverlap		CPO, Cplex, Gurobi	farming	agricultural industry, man- ufacturing industry	benchmark, https://, indus- trial partner, industry part- ner, real-life, supplemen- tary material, zenodo	
Wolf03 [397]	activity, completion-time, job, job-shop, machine, make-span, order, preempt, resource, scheduling, task		cumulative, dis- junctive	Java		pipeline		benchmark	edge-finding, not-first, not- last, sweep
WolfS05 [398]	activity, completion-time, dis- tributed, order, preempt, re- source, scheduling, task	OSP	cumulative		CHIP			real-world	energetic reasoning, not-last, sweep
WolinskiKG04 [399]	distributed, machine, order, precedence, resource, scheduling	SCC	cycle	Java	CHIP	pipeline			
WuBB05 [401]	job, make-span, release-date, resource, scheduling				Ilog Scheduler			benchmark	
YangSS19 [402]	activity, completion-time, lazy clause generation, machine, or- der, preempt, resource, schedul- ing, task		cumulative, dis- junctive	Prolog	CHIP, Choco Solver, Gecode, OPL, OR-Tools, SICStus	rectangle- packing		generated instance, https://	edge-finding, energetic rea- soning, not-last
YoungFS17 [403]	activity, lazy clause generation, machine, make-span, order, precedence, preempt, resource, scheduling, task	OSP, RCPSP, psplib	cumulative, dis- junctive		Chuffed, MiniZ-inc			benchmark, github, http://, https://, in- stance generator	time-tabling
YuraszeckMC23 [405]	cmax, distributed, due-date, flow-time, job, job-shop, ma- chine, make-span, open-shop, order, precedence, preempt, release-date, scheduling	JSSP, OSSP	noOverlap					benchmark, github, http://, https://	
ZhangJZL22 [410]	completion-time, due-date, flow- shop, job, machine, make-span, order, precedence, resource, scheduling, setup-time, tardi- ness, task, transportation	parallel ma- chine, single machine	alternative constraint, cumulative, endBeforeStart, noOverlap		OZ	semiconductor		benchmark	
ZhangLS12 [413] Zhou96 [414]	cmax, order, scheduling completion-time, due-date, job, job-shop, machine, order, prece- dence, release-date, scheduling, task		disjunctive	Prolog	Z3				time-tabling edge-finding
ZhouGL15 [416]	cmax, completion-time, distributed, flow-shop, job, job-shop, machine, make-span, order, re-scheduling, resource, scheduling, setup-time, tardiness, task, transportation	FJS, HFF, parallel machine	$\operatorname{cumulative}$		CHIP, Gecode, OR-Tools, OZ	railway		http://, real- world	
ZhuS02 [417]	activity, distributed, resource, scheduling								
ZibranR11 [418] ZibranR11a [419]	activity, order, scheduling activity, distributed, order, re- source, scheduling			Java	Cplex, OPL Cplex, OPL			http://	time-tabling

		Table 3: A	Automatically Extra	cted Paper Propert	ies (Requires Local (Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
cp-Hooker05 [179]	due-date, job, machine, make- span, order, precedence, release- date, resource, scheduling, tardi- ness, task		circuit, cumula- tive, disjunctive		Cplex, Ilog Scheduler, OPL				
cpaior-GayHS15 [130]	machine, manpower, order, pre- empt, resource, scheduling, task	RCPSP, psplib	cumulative, dis- junctive	Java	СНІР			benchmark, bitbucket, https://, real- world	edge-finding, energetic rea- soning, not- first, not-last, sweep, time- tabling
cpaior-SchuttFS13 [329]	activity, completion-time, lazy clause generation, machine, make-span, order, precedence, preempt, resource, scheduling, task	OSP, RCPSP, psplib	circuit, cumula- tive, disjunctive		CHIP, OZ			benchmark, http://	edge-finding, energetic rea- soning, not-last
cpaior-Vilim09 [381]	activity, completion-time, order, preempt, resource, scheduling, task		cumulative, cy- cle		Ilog Scheduler				edge-finding, energetic rea- soning, not-last

3 Journal Articles

		Table 4: Articles from bibtex					
Key	Authors	Title	LC	Cite	Year	Journal	Pages
PrataAN23 PrataAN23	Bruno A. Prata, Levi R. Abreu, Marcelo S. Nagano	Applications of constraint programming in production scheduling problems: A descriptive bibliometric analysis	Yes	[312]	2024	Results in Control and Optimization	1
abs-2402-00459 abs- 2402-00459	S. Nguyen, Dhananjay R. Thiruvady, Y. Sun, M. Zhang	Genetic-based Constraint Programming for Resource Constrained Job Scheduling	Yes	[279]	2024	CoRR	null
AbreuNP23 AbreuNP23	Levi Ribeiro de Abreu, Marcelo Seido Nagano, Bruno A. Prata	A new two-stage constraint programming approach for open shop scheduling problem with machine blocking	No	[90]	2023	Int. J. Prod. Res.	20
AkramNHRSA23 AkramNHRSA23	Bilal Omar Akram, Nor Kamariah Noordin, F. Hashim, Mohd Fadlee A. Rasid, Mustafa Ismael Salman, Abdulrahman M. Abdulghani	Joint Scheduling and Routing Optimization for Deterministic Hybrid Traffic in Time-Sensitive Networks Using Constraint Programming	Yes	[7]	2023	IEEE Access	16
Caballero23 Caballero23	Jordi Coll Caballero	Scheduling through logic-based tools	Yes	[71]	2023	Constraints An Int. J.	1
GurPAE23 GurPAE23	S. Gür, M. Pinarbasi, Haci Mehmet Alakas, T. Eren	Operating room scheduling with surgical team: a new approach with constraint programming and goal programming	Yes	[157]	2023	Central Eur. J. Oper. Res.	25
IsikYA23 IsikYA23	Eyüp Ensar Isik, Seyda Topaloglu Yildiz, Özge Satir Akpunar	Constraint programming models for the hybrid flow shop scheduling problem and its extensions	Yes	[186]	2023	Soft Comput.	28
LacknerMMWW23 LacknerMMWW23	M. Lackner, C. Mrkvicka, N. Musliu, D. Walkiewicz, F. Winter	Exact methods for the Oven Scheduling Problem	Yes	[224]	2023	Constraints An Int. J.	42
MontemanniD23 Monte- manniD23	R. Montemanni, M. Dell'Amico	Solving the Parallel Drone Scheduling Traveling Salesman Problem via Constraint Programming	Yes	[268]	2023	Algorithms	1
MontemanniD23a MontemanniD23a	R. Montemanni, M. Dell'Amico	Constraint programming models for the parallel drone scheduling vehicle routing problem	Yes	[267]	2023	EURO J. Comput. Optim.	1
ShaikhK23 ShaikhK23	Aftab Ahmed Shaikh, Abdullah Ayub Khan	Management of electronic ledger: a constraint programming approach for solving curricula scheduling problems	No	[336]	2023	Int. J. Electron. Secur. Digit. Forensics	12
YuraszeckMCCR23 YuraszeckMCCR23	F. Yuraszeck, E. Montero, D. Canut-de-Bon, N. Cuneo, M. Rojel	A Constraint Programming Formulation of the Multi- Mode Resource-Constrained Project Scheduling Problem for the Flexible Job Shop Scheduling Problem	Yes	[406]	2023	IEEE Access	11
abs-2305-19888 abs- 2305-19888	V. Heinz, A. Novák, M. Vlk, Z. Hanzálek	Constraint Programming and Constructive Heuristics for Parallel Machine Scheduling with Sequence-Dependent Setups and Common Servers	Yes	[170]	2023	CoRR	null
abs-2306-05747 abs- 2306-05747	P. Tassel, M. Gebser, K. Schekotihin	An End-to-End Reinforcement Learning Approach for Job-Shop Scheduling Problems Based on Constraint Pro- gramming	Yes	[356]	2023	CoRR	null
abs-2312-13682 abs- 2312-13682	G. Perez, G. Glorian, W. Suijlen, A. Lallouet	A Constraint Programming Model for Scheduling the Unloading of Trains in Ports: Extended	Yes	[300]	2023	CoRR	null
AbreuN22 AbreuN22	Levi Ribeiro de Abreu, Marcelo Seido Nagano	A new hybridization of adaptive large neighborhood search with constraint programming for open shop scheduling with sequence-dependent setup times	Yes	[89]	2022	Comput. Ind. Eng.	1
BourreauGGLT22 BourreauGGLT22	E. Bourreau, T. Garaix, M. Gondran, P. Lacomme, N. Tchernev	A constraint-programming based decomposition method for the Generalised Workforce Scheduling and Routing Problem (GWSRP)	No	[68]	2022	Int. J. Prod. Res.	19
CampeauG22 CampeauG22	L. Campeau, M. Gamache	Short- and medium-term optimization of underground mine planning using constraint programming	Yes	[72]	2022	Constraints An Int. J.	18
FetgoD22 FetgoD22	Sévérine Betmbe Fetgo, Clémentin Tayou Djamégni	Horizontally Elastic Edge-Finder Algorithm for Cumulative Resource Constraint Revisited	Yes	[116]	2022	Oper. Res. Forum	null
HeinzNVH22 HeinzNVH22	V. Heinz, A. Novák, M. Vlk, Z. Hanzálek	Constraint Programming and constructive heuristics for parallel machine scheduling with sequence-dependent se- tups and common servers	Yes	[169]	2022	Comput. Ind. Eng.	1
MullerMKP22 MullerMKP22	D. Müller, Marcus Gerhard Müller, D. Kress, E. Pesch	An algorithm selection approach for the flexible job shop scheduling problem: Choosing constraint programming solvers through machine learning	Yes	[272]	2022	Eur. J. Oper. Res.	18

	Table 4: Articles from bibtex											
Key	Authors	Title	LC	Cite	Year	Journal	Pages					
PohlAK22 PohlAK22	M. Pohl, C. Artigues, R. Kolisch	Solving the time-discrete winter runway scheduling prob- lem: A column generation and constraint programming approach	Yes	[305]	2022	Eur. J. Oper. Res.	16					
ShiYXQ22 ShiYXQ22	G. Shi, Z. Yang, Y. Xu, Y. Quan	Solving the integrated process planning and scheduling problem using an enhanced constraint programming-based approach	No	[337]	2022	Int. J. Prod. Res.	18					
SubulanC22 SubulanC22	K. Subulan, G. Çakir	Constraint programming-based transformation approach for a mixed fuzzy-stochastic resource investment project scheduling problem	Yes	[347]	2022	Soft Comput.	38					
YunusogluY22 YunusogluY22	P. Yunusoglu, Seyda Topaloglu Yildiz	Constraint programming approach for multi-resource- constrained unrelated parallel machine scheduling prob- lem with sequence-dependent setup times	No	[404]	2022	Int. J. Prod. Res.	18					
abs-2211-14492 abs- 2211-14492	Y. Sun, S. Nguyen, Dhananjay R. Thiruvady, X. Li, Andreas T. Ernst, U. Aickelin	Enhancing Constraint Programming via Supervised Learning for Job Shop Scheduling	Yes	[348]	2022	CoRR	null					
AbohashimaEG21 AbohashimaEG21	H. Abohashima, Amr B. Eltawil, Mohamed S. Gheith	A Mathematical Programming Model and a Firefly-Based Heuristic for Real-Time Traffic Signal Scheduling With Physical Constraints	Yes	[2]	2021	IEEE Access	14					
FanXG21 FanXG21	H. Fan, H. Xiong, M. Goh	Genetic programming-based hyper-heuristic approach for solving dynamic job shop scheduling problem with ex- tended technical precedence constraints	Yes	[115]	2021	Comput. Oper. Res.	1					
HubnerGSV21 HubnerGSV21	F. Hübner, P. Gerhards, C. Stürck, R. Volk	Solving the nuclear dismantling project scheduling prob- lem by combining mixed-integer and constraint program- ming techniques and metaheuristics	Yes	[184]	2021	J. Sched.	22					
KoehlerBFFHPSSS21 KoehlerBFFHPSSS21	J. Koehler, J. Bürgler, U. Fontana, E. Fux, Florian A. Herzog, M. Pouly, S. Saller, A. Salyaeva, P. Scheiblechner, K. Waelti	Cable tree wiring - benchmarking solvers on a real-world scheduling problem with a variety of precedence con- straints	Yes	[205]	2021	Constraints An Int. J.	51					
PandeyS21a PandeyS21a	V. Pandey, P. Saini	Constraint programming versus heuristic approach to MapReduce scheduling problem in Hadoop YARN for en- ergy minimization	Yes	[294]	2021	J. Supercomput.	29					
QinWSLS21 Qin- WSLS21	M. Qin, R. Wang, Z. Shi, L. Liu, L. Shi	A Genetic Programming-Based Scheduling Approach for Hybrid Flow Shop With a Batch Processor and Waiting Time Constraint	Yes	[314]	2021	IEEE Trans Autom. Sci. Eng.	12					
VlkHT21 VlkHT21	M. Vlk, Z. Hanzálek, S. Tang	Constraint programming approaches to joint routing and scheduling in time-sensitive networks	Yes	[387]	2021	Comput. Ind. Eng.	1					
ZhangYW21 ZhangYW21	L. Zhang, C. Yu, T. N. Wong	A graph-based constraint programming approach for the integrated process planning and scheduling problem	Yes	[411]	2021	Comput. Oper. Res.	1					
AlizdehS20 AlizdehS20	S. Alizdeh, S. Saeidi	Fuzzy project scheduling with critical path including risk and resource constraints using linear programming	No	[9]	2020	Int. J. Adv. Intell. Paradigms	14					
AstrandJZ20 AstrandJZ20	M. Åstrand, M. Johansson, A. Zanarini	Underground mine scheduling of mobile machines using Constraint Programming and Large Neighborhood Search	Yes	[22]	2020	Comput. Oper. Res.	1					
BadicaBI20 BadicaBI20	A. Badica, C. Badica, M. Ivanovic	Block structured scheduling using constraint logic programming	No	[23]	2020	AI Commun.	17					
BenediktMH20 Benedik- tMH20	O. Benedikt, I. Módos, Z. Hanzálek	Power of pre-processing: production scheduling with variable energy pricing and power-saving states	Yes	[48]	2020	Constraints An Int. J.	19					
LunardiBLRV20 Lu- nardiBLRV20	Willian T. Lunardi, Ernesto G. Birgin, P. Laborie, Débora P. Ronconi, H. Voos	Mixed Integer linear programming and constraint pro- gramming models for the online printing shop scheduling problem	Yes	[249]	2020	Comput. Oper. Res.	1					
MengZRZL20 MengZRZL20	L. Meng, C. Zhang, Y. Ren, B. Zhang, C. Lv	Mixed-integer linear programming and constraint programming formulations for solving distributed flexible job shop scheduling problem	Yes	[262]	2020	Comput. Ind. Eng.	1					
MokhtarzadehTNF20 MokhtarzadehTNF20	M. Mokhtarzadeh, R. Tavakkoli-Moghaddam, Behdin Vahedi Nouri, A. Farsi	Scheduling of human-robot collaboration in assembly of printed circuit boards: a constraint programming approach	No	[264]	2020	Int. J. Comput. Integr. Manuf.	14					
Polo-MejiaALB20 Polo- MejiaALB20	O. Polo-Mejía, C. Artigues, P. Lopez, V. Basini	Mixed-integer/linear and constraint programming approaches for activity scheduling in a nuclear research facility	No	[306]	2020	Int. J. Prod. Res.	18					

		Table 4: Articles from bibtex					
Key	Authors	Title	LC	Cite	Year	Journal	Pages
QinDCS20 QinDCS20	T. Qin, Y. Du, Jiang Hang Chen, M. Sha	Combining mixed integer programming and constraint programming to solve the integrated scheduling problem of container handling operations of a single vessel	Yes	[315]	2020	Eur. J. Oper. Res.	18
SacramentoSP20 SacramentoSP20	D. Sacramento, C. Solnon, D. Pisinger	Constraint Programming and Local Search Heuristic: a Matheuristic Approach for Routing and Scheduling Feeder Vessels in Multi-terminal Ports	Yes	[322]	2020	Oper. Res. Forum	null
WallaceY20 WallaceY20	M. Wallace, N. Yorke-Smith	A new constraint programming model and solving for the cyclic hoist scheduling problem	Yes	[389]	2020	Constraints An Int. J.	19
EscobetPQPRA19 EscobetPQPRA19	T. Escobet, V. Puig, J. Quevedo, P. Palà-Schönwälder, J. Romera, W. Adelman	Optimal batch scheduling of a multiproduct dairy process using a combined optimization/constraint programming approach	Yes	[110]	2019	Comput. Chem. Eng.	10
NishikawaSTT19 NishikawaSTT19	H. Nishikawa, K. Shimada, I. Taniguchi, H. Tomiyama	A Constraint Programming Approach to Scheduling of Malleable Tasks	No	[282]	2019	Int. J. Netw. Comput.	16
Novas19 Novas19	Juan M. Novas	Production scheduling and lot streaming at flexible job- shops environments using constraint programming	Yes	[284]	2019	Comput. Ind. Eng.	13
WikarekS19 WikarekS19	J. Wikarek, P. Sitek	A Constraint-Based Declarative Programming Framework for Scheduling and Resource Allocation Problems	Yes	[395]	2019	Vietnam. J. Comput. Sci.	22
abs-1901-07914 abs- 1901-07914	Jan Kristof Behrens, R. Lange, M. Mansouri	A Constraint Programming Approach to Simultaneous Task Allocation and Motion Scheduling for Industrial Dual-Arm Manipulation Tasks	Yes	[41]	2019	CoRR	null
abs-1902-01193 abs- 1902-01193	O. M. Alade, A. O. Amusat	Solving Nurse Scheduling Problem Using Constraint Programming Technique	Yes	[8]	2019	CoRR	null
abs-1902-09244 abs- 1902-09244	Viktoria A. Hauder, A. Beham, S. Raggl, Sophie N. Parragh, M. Affenzeller	On constraint programming for a new flexible project scheduling problem with resource constraints	Yes	[160]	2019	CoRR	null
abs-1911-04766 abs- 1911-04766	T. Geibinger, F. Mischek, N. Musliu	Investigating Constraint Programming and Hybrid Methods for Real World Industrial Test Laboratory Scheduling	Yes	[134]	2019	CoRR	null
BaptisteB18 BaptisteB18	P. Baptiste, N. Bonifas	Redundant cumulative constraints to compute preemptive bounds	Yes	[26]	2018	Discret. Appl. Math.	10
FahimiOQ18 FahimiOQ18	H. Fahimi, Y. Ouellet, C. Quimper	Linear-time filtering algorithms for the disjunctive con- straint and a quadratic filtering algorithm for the cumu- lative not-first not-last	Yes	[113]	2018	Constraints An Int. J.	22
GedikKEK18 GedikKEK18	R. Gedik, D. Kalathia, G. Egilmez, E. Kirac	A constraint programming approach for solving unrelated parallel machine scheduling problem	Yes	[132]	2018	Comput. Ind. Eng.	11
GokgurHO18 GokgurHO18	B. Gökgür, B. Hnich, S. Özpeynirci	Parallel machine scheduling with tool loading: a con- straint programming approach	No	[145]	2018	Int. J. Prod. Res.	17
LaborieRSV18 LaborieRSV18	P. Laborie, J. Rogerie, P. Shaw, P. Vilím	IBM ILOG CP optimizer for scheduling - 20+ years of scheduling with constraints at IBM/ILOG	Yes	[222]	2018	Constraints An Int. J.	41
PourDERB18 Pour- DERB18	Shahrzad M. Pour, John H. Drake, Lena Secher Ejlertsen, Kourosh Marjani Rasmussen, Edmund K. Burke	A hybrid Constraint Programming/Mixed Integer Programming framework for the preventive signaling maintenance crew scheduling problem	Yes	[308]	2018	Eur. J. Oper. Res.	12
ShinBBHO18 ShinBBHO18	Seung Yeob Shin, Y. Brun, H. Balasubramanian, Philip L. Henneman, Leon J. Osterweil	Discrete-Event Simulation and Integer Linear Programming for Constraint-Aware Resource Scheduling	Yes	[338]	2018	IEEE Trans. Syst. Man Cybern. Syst.	16
TangLWSK18 Tan- gLWSK18	Y. Tang, R. Liu, F. Wang, Q. Sun, Amr A. Kandil	Scheduling Optimization of Linear Schedule with Constraint Programming	No	[353]	2018	Comput. Aided Civ. Infrastructure Eng.	28
ZhangW18 ZhangW18	S. Zhang, S. Wang	Flexible Assembly Job-Shop Scheduling With Sequence- Dependent Setup Times and Part Sharing in a Dynamic Environment: Constraint Programming Model, Mixed- Integer Programming Model, and Dispatching Rules	Yes	[412]	2018	IEEE Trans. Engineering Management	18
KreterSS17 KreterSS17	S. Kreter, A. Schutt, Peter J. Stuckey	Using constraint programming for solving RCPSP/max-cal	Yes	[217]	2017	Constraints An Int. J.	31
NattafAL17 NattafAL17	M. Nattaf, C. Artigues, P. Lopez	Cumulative scheduling with variable task profiles and concave piecewise linear processing rate functions	Yes	[277]	2017	Constraints An Int. J.	18
Bonfietti16 Bonfietti16	A. Bonfietti	A constraint programming scheduling solver for the MPOpt programming environment	No	[60]	2016	Intelligenza Artificiale	13

		Table 4: Articles from bibtex					
Key	Authors	Title	LC	Cite	Year	Journal	Pages
DoulabiRP16 DoulabiRP16	Seyed Hossein Hashemi Doulabi, L. Rousseau, G. Pesant	A Constraint-Programming-Based Branch-and-Price- and-Cut Approach for Operating Room Planning and Scheduling	No	[104]	2016	INFORMS J. Comput.	17
NovaraNH16 NovaraNH16	Franco M. Novara, Juan M. Novas, Gabriela P. Henning	A novel constraint programming model for large-scale scheduling problems in multiproduct multistage batch plants: Limited resources and campaign-based operation	Yes	[283]	2016	Comput. Chem. Eng.	17
ZarandiKS16 ZarandiKS16	M. H. Fazel Zarandi, H. Khorshidian, Mohsen Ak- barpour Shirazi	A constraint programming model for the scheduling of JIT cross-docking systems with preemption	Yes	[407]	2016	J. Intell. Manuf.	17
EvenSH15a EvenSH15a	C. Even, A. Schutt, Pascal Van Hentenryck	A Constraint Programming Approach for Non-Preemptive Evacuation Scheduling	Yes	[112]	2015	CoRR	null
GoelSHFS15 GoelSHFS15	V. Goel, M. Slusky, Willem-Jan van Hoeve, Kevin C. Furman, Y. Shao	Constraint programming for LNG ship scheduling and inventory management	Yes	[144]	2015	Eur. J. Oper. Res.	12
Kameugne15 Kameugne15	R. Kameugne	Propagation techniques of resource constraint for cumulative scheduling	Yes	[191]	2015	Constraints An Int. J.	2
LetortCB15 LetortCB15	A. Letort, M. Carlsson, N. Beldiceanu	Synchronized sweep algorithms for scalable scheduling constraints	Yes	[230]	2015	Constraints An Int. J.	52
NattafAL15 NattafAL15	M. Nattaf, C. Artigues, P. Lopez	A hybrid exact method for a scheduling problem with a continuous resource and energy constraints	Yes	[276]	2015	Constraints An Int. J.	21
Siala15 Siala15	M. Siala	Search, propagation, and learning in sequencing and scheduling problems	Yes	[339]	2015	Constraints An Int. J.	2
SimoninAHL15 Simoni- nAHL15	G. Simonin, C. Artigues, E. Hebrard, P. Lopez	Scheduling scientific experiments for comet exploration	Yes	[342]	2015	Constraints An Int. J.	23
WangMD15 WangMD15	T. Wang, N. Meskens, D. Duvivier	Scheduling operating theatres: Mixed integer programming vs. constraint programming	Yes	[392]	2015	Eur. J. Oper. Res.	13
GrimesIOS14 GrimesIOS14	D. Grimes, G. Ifrim, B. O'Sullivan, H. Simonis	Analyzing the impact of electricity price forecasting on energy cost-aware scheduling	Yes	[152]	2014	Sustain. Comput. Informatics Syst.	16
KameugneFSN14 KameugneFSN14	R. Kameugne, Laure Pauline Fotso, Joseph D. Scott, Y. Ngo-Kateu	A quadratic edge-finding filtering algorithm for cumula- tive resource constraints	Yes	[195]	2014	Constraints An Int. J.	27
NovasH14 NovasH14	Juan M. Novas, Gabriela P. Henning	Integrated scheduling of resource-constrained flexible manufacturing systems using constraint programming	Yes	[287]	2014	Expert Syst. Appl.	14
BegB13 BegB13	Mirza Omer Beg, Peter van Beek	A constraint programming approach for integrated spatial and temporal scheduling for clustered architectures	No	[39]	2013	ACM Trans. Embed. Comput. Syst.	23
HeinzSB13 HeinzSB13	S. Heinz, J. Schulz, J. Christopher Beck	Using dual presolving reductions to reformulate cumulative constraints	Yes	[168]	2013	Constraints An Int. J.	36
OzturkTHO13 Ozturk- THO13	C. Öztürk, S. Tunali, B. Hnich, M. Arslan Ornek	Balancing and scheduling of flexible mixed model assembly lines	Yes	[293]	2013	Constraints An Int. J.	36
HeinzSSW12 HeinzSSW12	S. Heinz, T. Schlechte, R. Stephan, M. Winkler	Solving steel mill slab design problems	Yes	[166]	2012	Constraints An Int. J.	12
LimtanyakulS12 LimtanyakulS12	K. Limtanyakul, U. Schwiegelshohn	Improvements of constraint programming and hybrid methods for scheduling of tests on vehicle prototypes	Yes	[237]	2012	Constraints An Int. J.	32
LombardiM12 LombardiM12	M. Lombardi, M. Milano	Optimal methods for resource allocation and scheduling: a cross-disciplinary survey	Yes	[245]	2012	Constraints An Int. J.	35
NovasH12 NovasH12	Juan M. Novas, Gabriela P. Henning	A comprehensive constraint programming approach for the rolling horizon-based scheduling of automated wet- etch stations	Yes	[286]	2012	Comput. Chem. Eng.	17
BartakS11 BartakS11	R. Barták, Miguel A. Salido	Constraint satisfaction for planning and scheduling prob- lems	Yes	[34]	2011	Constraints An Int. J.	5
BeckFW11 BeckFW11	J. Christopher Beck, T. K. Feng, J. Watson	Combining Constraint Programming and Local Search for Job-Shop Scheduling	No	[38]	2011	INFORMS J. Comput.	14
BeldiceanuCDP11 BeldiceanuCDP11	N. Beldiceanu, M. Carlsson, S. Demassey, E. Poder	New filtering for the <i>cumulative</i> constraint in the context of non-overlapping rectangles	Yes	[43]	2011	Ann. Oper. Res.	24
HachemiGR11 Ha- chemiGR11	Nizar El Hachemi, M. Gendreau, L. Rousseau	A hybrid constraint programming approach to the log- truck scheduling problem	Yes	[158]	2011	Ann. Oper. Res.	16
KelbelH11 KelbelH11	J. Kelbel, Z. Hanzálek	Solving production scheduling with earliness/tardiness penalties by constraint programming	Yes	[198]	2011	J. Intell. Manuf.	10

		Table 4: Articles from bibtex					
Key	Authors	Title	LC	Cite	Year	Journal	Pages
KovacsB11 KovacsB11	A. Kovács, J. Christopher Beck	A global constraint for total weighted completion time for unary resources	Yes	[210]	2011	Constraints An Int. J.	24
KovacsK11 KovacsK11	A. Kovács, T. Kis	Constraint programming approach to a bilevel scheduling problem	Yes	[212]	2011	Constraints An Int. J.	24
SchausHMCMD11 SchausHMCMD11	P. Schaus, Pascal Van Hentenryck, J. Monette, C. Coffrin, L. Michel, Y. Deville	Solving Steel Mill Slab Problems with constraint-based techniques: CP, LNS, and CBLS	Yes	[326]	2011	Constraints An Int. J.	23
SchuttFSW11 SchuttFSW11	A. Schutt, T. Feydy, Peter J. Stuckey, Mark G. Wallace	Explaining the cumulative propagator	Yes	[332]	2011	Constraints An Int. J.	33
TopalogluO11 TopalogluO11	S. Topaloglu, I. Ozkarahan	A constraint programming-based solution approach for medical resident scheduling problems	Yes	[364]	2011	Comput. Oper. Res.	10
TrojetHL11 TrojetHL11	M. Trojet, F. H'Mida, P. Lopez	Project scheduling under resource constraints: Applica- tion of the cumulative global constraint in a decision sup- port framework	Yes	[367]	2011	Comput. Ind. Eng.	7
LopesCSM10 LopesCSM10	Tony Minoru Tamura Lopes, André A. Ciré, Cid Carvalho de Souza, Arnaldo Vieira Moura	A hybrid model for a multiproduct pipeline planning and scheduling problem	Yes	[246]	2010	Constraints An Int. J.	39
NovasH10 NovasH10	Juan M. Novas, Gabriela P. Henning	Reactive scheduling framework based on domain knowledge and constraint programming	Yes	[285]	2010	Comput. Chem. Eng.	20
ZeballosQH10 ZeballosQH10	L. Zeballos, O. Quiroga, Gabriela P. Henning	A constraint programming model for the scheduling of flexible manufacturing systems with machine and tool limitations	Yes	[409]	2010	Eng. Appl. Artif. Intell.	20
BocewiczBB09 BocewiczBB09	G. Bocewicz, I. Bach, Zbigniew Antoni Banaszak	Logic-algebraic method based and constraints program- ming driven approach to AGVs scheduling	No	[56]	2009	Int. J. Intell. Inf. Database Syst.	19
GarridoAO09 GarridoAO09	A. Garrido, M. Arangú, E. Onaindia	A constraint programming formulation for planning: from plan scheduling to plan generation	Yes	[126]	2009	J. Sched.	30
abs-0907-0939 abs-0907- 0939	T. Petit, E. Poder	The Soft Cumulative Constraint	Yes	[302]	2009	CoRR	null
GarridoOS08 GarridoOS08	A. Garrido, E. Onaindia, Óscar Sapena	Planning and scheduling in an e-learning environment. A constraint-programming-based approach	Yes	[127]	2008	Eng. Appl. Artif. Intell.	11
KovacsB08 KovacsB08	A. Kovács, J. Christopher Beck	A global constraint for total weighted completion time for cumulative resources	Yes	[209]	2008	Eng. Appl. Artif. Intell.	7
LiessM08 LiessM08	O. Liess, P. Michelon	A constraint programming approach for the resource- constrained project scheduling problem	Yes	[232]	2008	Ann. Oper. Res.	12
MalikMB08 MalikMB08	Abid M. Malik, J. McInnes, Peter van Beek	Optimal Basic Block Instruction Scheduling for Multiple- Issue Processors Using Constraint Programming	No	[256]	2008	Int. J. Artif. Intell. Tools	18
Simonis07 Simonis07 Hooker06 Hooker06	H. Simonis John N. Hooker	Models for Global Constraint Applications An Integrated Method for Planning and Scheduling to Minimize Tardiness	Yes Yes	[344] [180]	2007 2006	Constraints An Int. J. Constraints An Int. J.	30 19
KhayatLR06 KhayatLR06	Ghada El Khayat, A. Langevin, D. Riopel	Integrated production and material handling scheduling using mathematical programming and constraint programming	Yes	[200]	2006	Eur. J. Oper. Res.	15
SadykovW06 SadykovW06	R. Sadykov, Laurence A. Wolsey	Integer Programming and Constraint Programming in Solving a Multimachine Assignment Scheduling Problem with Deadlines and Release Dates	No	[324]	2006	INFORMS J. Comput.	9
SureshMOK06 SureshMOK06	S. Sundaram, V. Mani, S. N. Omkar, H. J. Kim	Divisible load scheduling in distributed system with buffer constraints: genetic algorithm and linear programming approach	No	[350]	2006	Int. J. Parallel Emergent Distributed Syst.	19
Hooker05 Hooker05	John N. Hooker	A Hybrid Method for the Planning and Scheduling	Yes	[178]	2005	Constraints An Int. J.	17
VilimBC05 VilimBC05	P. Vilím, R. Barták, O. Cepek	Extension of $O(n \log n)$ Filtering Algorithms for the Unary Resource Constraint to Optional Activities	Yes	[384]	2005	Constraints An Int. J.	23
ZeballosH05 ZeballosH05	L. Zeballos, Gabriela P. Henning	A Constraint Programming Approach to FMS Scheduling. Consideration of Storage and Transportation Resources	Yes	[408]	2005	Inteligencia Artif.	10
PoderBS04 PoderBS04	E. Poder, N. Beldiceanu, E. Sanlaville	Computing a lower approximation of the compulsory part of a task with varying duration and varying resource con- sumption	Yes	[304]	2004	Eur. J. Oper. Res.	16
KuchcinskiW03 KuchcinskiW03	K. Kuchcinski, C. Wolinski	Global approach to assignment and scheduling of complex behaviors based on HCDG and constraint programming	Yes	[218]	2003	J. Syst. Archit.	15

		Table 4: Articles from bibtex					
Key	Authors	Title	LC	Cite	Year	Journal	Pages
Tsang03 Tsang03	Edward P. K. Tsang	Constraint Based Scheduling: Applying Constraint Programming to Scheduling Problems	Yes	[368]	2003	J. Sched.	2
LorigeonBB02 LorigeonBB02	T. Lorigeon, J. Billaut, J. Bouquard	A dynamic programming algorithm for scheduling jobs in a two-machine open shop with an availability constraint	No	[248]	2002	J. Oper. Res. Soc.	8
Timpe02 Timpe02	C. Timpe	Solving planning and scheduling problems with combined integer and constraint programming	Yes	[362]	2002	OR Spectr.	18
MartinPY01 MartinPY01	F. Martin, A. Pinkney, X. Yu	Cane Railway Scheduling via Constraint Logic Programming: Labelling Order and Constraints in a Real-Life Application	Yes	[258]	2001	Ann. Oper. Res.	17
Mason01 Mason01	Andrew J. Mason	Elastic Constraint Branching, the Wedelin/Carmen Lagrangian Heuristic and Integer Programming for Personnel Scheduling	Yes	[259]	2001	Ann. Oper. Res.	38
ArtiguesR00 ArtiguesR00	C. Artigues, F. Roubellat	A polynomial activity insertion algorithm in a multi- resource schedule with cumulative constraints and mul- tiple modes	Yes	[17]	2000	Eur. J. Oper. Res.	20
BaptisteP00 BaptisteP00	P. Baptiste, Claude Le Pape	Constraint Propagation and Decomposition Techniques for Highly Disjunctive and Highly Cumulative Project Scheduling Problems	Yes	[29]	2000	Constraints An Int. J.	21
HeipckeCCS00 Heipck- eCCS00	S. Heipcke, Y. Colombani, Cristina C. B. Cavalcante, Cid C. de Souza	Scheduling under Labour Resource Constraints	Yes	[171]	2000	Constraints An Int. J.	8
KorbaaYG00 KorbaaYG00	O. Korbaa, P. Yim, J. Gentina	Solving Transient Scheduling Problems with Constraint Programming	Yes	[207]	2000	Eur. J. Control	10
LopezAKYG00 LopezA- KYG00	P. Lopez, H. Alla, O. Korbaa, P. Yim, J. Gentina	Discussion on: 'Solving Transient Scheduling Problems with Constraint Programming' by O. Korbaa, P. Yim, and JC. Gentina	Yes	[247]	2000	Eur. J. Control	4
SakkoutW00 SakkoutW00	Hani El Sakkout, M. Wallace	Probe Backtrack Search for Minimal Perturbation in Dynamic Scheduling	Yes	[325]	2000	Constraints An Int. J.	30
SchildW00 SchildW00	K. Schild, J. Würtz	Scheduling of Time-Triggered Real-Time Systems	Yes	[327]	2000	Constraints An Int. J.	23
BensanaLV99 BensanaLV99	E. Bensana, M. Lemaître, G. Verfaillie	Earth Observation Satellite Management	Yes	[51]	1999	Constraints An Int. J.	7
BelhadjiI98 BelhadjiI98	S. Belhadji, A. Isli	Temporal Constraint Satisfaction Techniques in Job Shop Scheduling Problem Solving	Yes	[46]	1998	Constraints An Int. J.	9
PapaB98 PapaB98	Claude Le Pape, P. Baptiste	Resource Constraints for Preemptive Job-shop Scheduling	Yes	[296]	1998	Constraints An Int. J.	25
Darby-DowmanLMZ97 Darby-DowmanLMZ97	K. Darby-Dowman, J. Little, G. Mitra, M. Zaffalon	Constraint Logic Programming and Integer Programming Approaches and Their Collaboration in Solving an Assignment Scheduling Problem	Yes	[86]	1997	Constraints An Int. J.	20
FalaschiGMP97 FalaschiGMP97	M. Falaschi, M. Gabbrielli, K. Marriott, C. Palamidessi	Constraint Logic Programming with Dynamic Scheduling: A Semantics Based on Closure Operators	Yes	[114]	1997	Inf. Comput.	27
Zhou97 Zhou97	J. Zhou	A Permutation-Based Approach for Solving the Job-Shop Problem	Yes	[415]	1997	Constraints An Int. J.	29
Wallace96 Wallace96	M. Wallace	Practical Applications of Constraint Programming	Yes	[388]	1996	Constraints An Int. J.	30
Tay92 Tay92	David B. H. Tay	COPS: A Constraint Programming Approach to Resource-Limited Project Scheduling	No	[357]	1992	Comput. J.	null
DincbasSH90 DincbasSH90	M. Dincbas, H. Simonis, Pascal Van Hentenryck	Solving Large Combinatorial Problems in Logic Programming	Yes	[101]	1990	J. Log. Program.	19

Table 5: Manually Defined Article Properties

Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints
PrataAN23 PrataAN23	Applications of constraint programming in production scheduling problems: A descriptive bibliometric analysis	-	-		-	-	survey	-
abs-2402-00459 abs- 2402-00459	Genetic-based Constraint Programming for Resource Constrained Job Scheduling	OR-Tools	У		n	-	RCJS	cumulatives
AbreuNP23 AbreuNP23	A new two-stage constraint programming approach for open shop scheduling problem with machine blocking	?	?		?	?	?	?
AkramNHRSA23 AkramNHRSA23	Joint Scheduling and Routing Optimization for Deterministic Hybrid Traffic in Time-Sensitive Networks Using Constraint Programming	OR-Tools	n		n	-	TSN	-
Caballero23 Caballero23	Scheduling through logic-based tools	SAT	-		-	PhD Thesis	RCPSP	-
GurPAE23 GurPAE23	Operating room scheduling with surgical team: a new approach with constraint programming and goal programming	Cplex	n		n	-	-	-
IsikYA23 IsikYA23	Constraint programming models for the hybrid flow shop scheduling problem and its extensions	OPL CP Opt	У		У	-	HFSP	alternative endBeforeStart noOverlap
LacknerMMWW23 LacknerMMWW23	Exact methods for the Oven Scheduling Problem	MiniZinc OPL	DZN JSON		У	[223]	OSP	cumulative alternative noOverlap forbidExtent
MontemanniD23 MontemanniD23	Solving the Parallel Drone Scheduling Traveling Salesman Problem via Constraint Programming	OR-Tools	ref	У	n	÷	PDSTSP	circuit
MontemanniD23a MontemanniD23a	Constraint programming models for the parallel drone scheduling vehicle routing problem	OR-Tools	ref		n	-	PDSTSP	circuit multipleCircuit
ShaikhK23 ShaikhK23	Management of electronic ledger: a constraint program- ming approach for solving curricula scheduling problems	?	?		?	?	?	?
YuraszeckMCCR23 YuraszeckMCCR23	A Constraint Programming Formulation of the Multi- Mode Resource-Constrained Project Scheduling Problem for the Flexible Job Shop Scheduling Problem	CP Opt	ref		n	-	FJSSP	alternative endBeforeStart cumulative
abs-2305-19888 abs- 2305-19888	Constraint Programming and Constructive Heuristics for Parallel Machine Scheduling with Sequence-Dependent Setups and Common Servers	CP Opt Gurobi	У	У	n	-	$P seq, ser C_{max}$	alternative noOverlap cumulative
abs-2306-05747 abs- 2306-05747	An End-to-End Reinforcement Learning Approach for Job-Shop Scheduling Problems Based on Constraint Pro- gramming	custom Choco	ref		n	-	JSSP	noOverlap
abs-2312-13682 abs- 2312-13682	A Constraint Programming Model for Scheduling the Unloading of Trains in Ports: Extended	custom	n		n	-	SUTP	table disjunctive
AbreuN22 AbreuN22	A new hybridization of adaptive large neighborhood search with constraint programming for open shop scheduling with sequence-dependent setup times	Cplex CP Opt	У		n	-	OSSPST	noOverlap
BourreauGGLT22 BourreauGGLT22	A constraint-programming based decomposition method for the Generalised Workforce Scheduling and Routing Problem (GWSRP)							
CampeauG22 CampeauG22	Short- and medium-term optimization of underground mine planning using constraint programming	CP Opt	ref		n			pulse alwaysIn endBeforeStart noOverlap
FetgoD22 FetgoD22	Horizontally Elastic Edge-Finder Algorithm for Cumulative Resource Constraint Revisited							noo veriap
HeinzNVH22 HeinzNVH22	Constraint Programming and constructive heuristics for parallel machine scheduling with sequence-dependent se- tups and common servers							
MullerMKP22 MullerMKP22	An algorithm selection approach for the flexible job shop scheduling problem: Choosing constraint programming solvers through machine learning							

Table 5: Manually Defined Article Properties

Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints
PohlAK22 PohlAK22	Solving the time-discrete winter runway scheduling prob- lem: A column generation and constraint programming approach							
ShiYXQ22 ShiYXQ22	Solving the integrated process planning and scheduling problem using an enhanced constraint programming-based approach							
SubulanC22 SubulanC22	Constraint programming-based transformation approach for a mixed fuzzy-stochastic resource investment project scheduling problem							
YunusogluY22 YunusogluY22	Constraint programming approach for multi-resource- constrained unrelated parallel machine scheduling prob- lem with sequence-dependent setup times							
abs-2211-14492 abs- 2211-14492	Enhancing Constraint Programming via Supervised Learning for Job Shop Scheduling							
AbohashimaEG21 AbohashimaEG21	A Mathematical Programming Model and a Firefly-Based Heuristic for Real-Time Traffic Signal Scheduling With Physical Constraints							
FanXG21 FanXG21	Genetic programming-based hyper-heuristic approach for solving dynamic job shop scheduling problem with ex- tended technical precedence constraints							
HubnerGSV21 HubnerGSV21	Solving the nuclear dismantling project scheduling prob- lem by combining mixed-integer and constraint program- ming techniques and metaheuristics							
KoehlerBFFHPSSS21 KoehlerBFFHPSSS21	Cable tree wiring - benchmarking solvers on a real-world scheduling problem with a variety of precedence constraints	CP Opt OR-Tools Chuffed Cplex Gurobi Z3 OptiMathSat	DZN		У	-	CTW	alldifferent inverse
PandeyS21a PandeyS21a	Constraint programming versus heuristic approach to MapReduce scheduling problem in Hadoop YARN for en- ergy minimization							
QinWSLS21 Qin- WSLS21	A Genetic Programming-Based Scheduling Approach for Hybrid Flow Shop With a Batch Processor and Waiting Time Constraint							
VlkHT21 VlkHT21	Constraint programming approaches to joint routing and scheduling in time-sensitive networks							
ZhangYW21 ZhangYW21 AlizdehS20 AlizdehS20	A graph-based constraint programming approach for the integrated process planning and scheduling problem							
AstrandJZ20 As-	Fuzzy project scheduling with critical path including risk and resource constraints using linear programming							
trandJZ20 As- trandJZ20 BadicaBI20 BadicaBI20	Underground mine scheduling of mobile machines using Constraint Programming and Large Neighborhood Search Block structured scheduling using constraint logic pro-							
BenediktMH20 Benedik-	gramming Power of pre-processing: production scheduling with vari-	CP Opt	JSON		у			
tMH20 LunardiBLRV20 Lu-	able energy pricing and power-saving states Mixed Integer linear programming and constraint pro-	Gurobi	0.5011		J			
nardiBLRV20	gramming models for the online printing shop scheduling problem							
MengZRZL20 MengZRZL20	Mixed-integer linear programming and constraint pro- gramming formulations for solving distributed flexible job shop scheduling problem							

Table 5: Manually Defined Article Properties

Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints
MokhtarzadehTNF20 MokhtarzadehTNF20	Scheduling of human-robot collaboration in assembly of printed circuit boards: a constraint programming approach							
Polo-MejiaALB20 Polo- MejiaALB20	Mixed-integer/linear and constraint programming approaches for activity scheduling in a nuclear research facility							
QinDCS20 QinDCS20	Combining mixed integer programming and constraint programming to solve the integrated scheduling problem of container handling operations of a single vessel							
SacramentoSP20 SacramentoSP20	Constraint Programming and Local Search Heuristic: a Matheuristic Approach for Routing and Scheduling Feeder Vessels in Multi-terminal Ports							
WallaceY20 WallaceY20	A new constraint programming model and solving for the cyclic hoist scheduling problem	MiniZinc	DZN		У		CHSP	
EscobetPQPRA19 EscobetPQPRA19	Optimal batch scheduling of a multiproduct dairy process using a combined optimization/constraint programming approach							
NishikawaSTT19 NishikawaSTT19	A Constraint Programming Approach to Scheduling of Malleable Tasks							
Novas19 Novas19	Production scheduling and lot streaming at flexible job- shops environments using constraint programming							
WikarekS19 WikarekS19	A Constraint-Based Declarative Programming Framework for Scheduling and Resource Allocation Problems							
abs-1901-07914 abs- 1901-07914	A Constraint Programming Approach to Simultaneous Task Allocation and Motion Scheduling for Industrial Dual-Arm Manipulation Tasks							
abs-1902-01193 abs- 1902-01193	Solving Nurse Scheduling Problem Using Constraint Programming Technique							
abs-1902-09244 abs- 1902-09244 abs-1911-04766 abs-	On constraint programming for a new flexible project scheduling problem with resource constraints Investigating Constraint Programming and Hybrid Meth-							
1911-04766 BaptisteB18 Baptis- teB18	ods for Real World Industrial Test Laboratory Scheduling Redundant cumulative constraints to compute preemptive bounds							
FahimiOQ18 FahimiOQ18	Linear-time filtering algorithms for the disjunctive constraint and a quadratic filtering algorithm for the cumulative not-first not-last	Choco	(y)		n		RCPSP	disjunctive cumulative
GedikKEK18 GedikKEK18	A constraint programming approach for solving unrelated parallel machine scheduling problem							
GokgurHO18 GokgurHO18 LaborieRSV18 Labori-	Parallel machine scheduling with tool loading: a constraint programming approach IBM ILOG CP optimizer for scheduling - 20+ years of	OP Opt	_		_	_	_	_
eRSV18 PourDERB18 Pour-	scheduling with constraints at IBM/ILOG A hybrid Constraint Programming/Mixed Integer Pro-	от орг	_		_	_	_	_
DERB18	gramming framework for the preventive signaling maintenance crew scheduling problem							
ShinBBHO18 ShinBBHO18 TangLWSK18 Tan-	Discrete-Event Simulation and Integer Linear Programming for Constraint-Aware Resource Scheduling Scheduling Optimization of Linear Schedule with Con-							
gLWSK18 ZhangW18 ZhangW18	straint Programming Flexible Assembly Job-Shop Scheduling With Sequence- Dependent Setup Times and Part Sharing in a Dynamic Environment: Constraint Programming Model, Mixed- Integer Programming Model, and Dispatching Rules							

Table 5: Manually Defined Article Properties

Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints
KreterSS17 KreterSS17	Using constraint programming for solving RCPSP/max-cal	MiniZinc Chuffed Cplex	dead			[216]	RCPSP	cumulative cumulativeCalendar
NattafAL17 NattafAL17	Cumulative scheduling with variable task profiles and concave piecewise linear processing rate functions	Cplex	n		n	-	CECSP	-
Bonfietti16 Bonfietti16	A constraint programming scheduling solver for the MPOpt programming environment							
DoulabiRP16 DoulabiRP16	A Constraint-Programming-Based Branch-and-Price- and-Cut Approach for Operating Room Planning and							
NovaraNH16 NovaraNH16	Scheduling A novel constraint programming model for large-scale scheduling problems in multiproduct multistage batch plants: Limited resources and campaign-based operation							
ZarandiKS16 ZarandiKS16	A constraint programming model for the scheduling of JIT cross-docking systems with preemption							
EvenSH15a EvenSH15a	A Constraint Programming Approach for Non-Preemptive Evacuation Scheduling							
GoelSHFS15 GoelSHFS15	Constraint programming for LNG ship scheduling and inventory management							
Kameugne15 Kameugne15	Propagation techniques of resource constraint for cumulative scheduling	-	-		-	PhDThesis	RCPSP	
LetortCB15 LetortCB15	Synchronized sweep algorithms for scalable scheduling constraints	Choco SICStus	dead		-	[229]	-	cumulative dimCumulative dimCumulativePrecedences
NattafAL15 NattafAL15	A hybrid exact method for a scheduling problem with a continuous resource and energy constraints	Cplex	n		n		CSCSP	dimountailver recedences
Siala15 Siala15	Search, propagation, and learning in sequencing and scheduling problems	-	-		-	PhD Thesis		
SimoninAHL15 SimoninAHL15	Scheduling scientific experiments for comet exploration	MOST Ilog Scheduler	n		n	[341]		cumulative dataTransfer
WangMD15 WangMD15	Scheduling operating theatres: Mixed integer programming vs. constraint programming	Benedulei						
GrimesIOS14 GrimesIOS14	Analyzing the impact of electricity price forecasting on energy cost-aware scheduling							
KameugneFSN14 KameugneFSN14	A quadratic edge-finding filtering algorithm for cumulative resource constraints	Gecode	У			[194]	CuSP	cumulative
NovasH14 NovasH14 BegB13 BegB13	Integrated scheduling of resource-constrained flexible manufacturing systems using constraint programming A constraint programming approach for integrated spatial							
	and temporal scheduling for clustered architectures	a ,					D 0D 0D	
HeinzSB13 HeinzSB13	Using dual presolving reductions to reformulate cumulative constraints	Cplex SCIP	ref		-	-	RCPSP RCPSP/max	cumulative
OzturkTHO13 Ozturk- THO13	Balancing and scheduling of flexible mixed model assembly lines	Ilog Solver Ilog Scheduler Cplex	У		-	-	SBSFMMAL	alddifferent disjunctive
HeinzSSW12 HeinzSSW12	Solving steel mill slab design problems	Opicx	Cplex		dead	-	SMSDP	-
LimtanyakulS12 LimtanyakulS12	Improvements of constraint programming and hybrid methods for scheduling of tests on vehicle prototypes	Cplex Ilog Scheduler	dead		-	-		
LombardiM12 LombardiM12	Optimal methods for resource allocation and scheduling: a cross-disciplinary survey	-	-		-	-	survey	-
NovasH12 NovasH12	A comprehensive constraint programming approach for the rolling horizon-based scheduling of automated wet- etch stations							
BartakS11 BartakS11	Constraint satisfaction for planning and scheduling prob- lems	-	-		-		survey	

Table 5: Manually Defined Article Properties

Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints
BeckFW11 BeckFW11	Combining Constraint Programming and Local Search for Job-Shop Scheduling							
BeldiceanuCDP11 BeldiceanuCDP11	New filtering for the <i>cumulative</i> constraint in the context of non-overlapping rectangles							
HachemiGR11 Ha- chemiGR11	A hybrid constraint programming approach to the log- truck scheduling problem							
KelbelH11 KelbelH11	Solving production scheduling with earliness/tardiness penalties by constraint programming							
KovacsB11 KovacsB11	A global constraint for total weighted completion time for unary resources	Ilog Scheduler	n		n	-		Completion
KovacsK11 KovacsK11	Constraint programming approach to a bilevel scheduling problem	Ilog Solver	n		n	-	Bilevel Opt	
SchausHMCMD11 SchausHMCMD11	Solving Steel Mill Slab Problems with constraint-based techniques: CP, LNS, and CBLS	Comet	dead				SMSDP	
SchuttFSW11 SchuttFSW11	Explaining the cumulative propagator	MiniZinc	PSPLib		-	-	RCPSP	cumulative
TopalogluO11 TopalogluO11	A constraint programming-based solution approach for medical resident scheduling problems							
TrojetHL11 TrojetHL11	Project scheduling under resource constraints: Applica- tion of the cumulative global constraint in a decision sup- port framework							
LopesCSM10 LopesCSM10	A hybrid model for a multiproduct pipeline planning and scheduling problem	Ilog Solver	-		-	[271, 270]		
NovasH10 NovasH10	Reactive scheduling framework based on domain knowledge and constraint programming							
ZeballosQH10 ZeballosQH10	A constraint programming model for the scheduling of flexible manufacturing systems with machine and tool limitations							
BocewiczBB09 BocewiczBB09	Logic-algebraic method based and constraints program- ming driven approach to AGVs scheduling							
GarridoAO09 GarridoAO09	A constraint programming formulation for planning: from plan scheduling to plan generation							
abs-0907-0939 abs-0907- 0939	The Soft Cumulative Constraint							
GarridoOS08 GarridoOS08	Planning and scheduling in an e-learning environment. A constraint-programming-based approach							
KovacsB08 KovacsB08	A global constraint for total weighted completion time for cumulative resources							
LiessM08 LiessM08	A constraint programming approach for the resource- constrained project scheduling problem							
MalikMB08 MalikMB08	Optimal Basic Block Instruction Scheduling for Multiple- Issue Processors Using Constraint Programming							
Simonis07 Simonis07	Models for Global Constraint Applications	CHIP	n		n			cumulative diffn cycle
Hooker06 Hooker06	An Integrated Method for Planning and Scheduling to Minimize Tardiness	OPL Cplex Ilog Scheduler	n		n	[179]	CuSP	inverse cumulative
KhayatLR06 KhayatLR06	Integrated production and material handling scheduling using mathematical programming and constraint programming							
SadykovW06 SadykovW06	Integer Programming and Constraint Programming in Solving a Multimachine Assignment Scheduling Problem with Deadlines and Release Dates							

Table 5: Manually Defined Article Properties

Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints
SureshMOK06 SureshMOK06	Divisible load scheduling in distributed system with buffer constraints: genetic algorithm and linear programming approach							
Hooker05 Hooker05	A Hybrid Method for the Planning and Scheduling	OPL Cplex Ilog Scheduler	n		n	[177]	CuSP	$\operatorname{cumulative}$
VilimBC05 VilimBC05	Extension of $O(n \log n)$ Filtering Algorithms for the Unary Resource Constraint to Optional Activities	. 8	n		n	[383]	JSSP	disjunctive
ZeballosH05 ZeballosH05	A Constraint Programming Approach to FMS Scheduling. Consideration of Storage and Transportation Resources							
PoderBS04 PoderBS04	Computing a lower approximation of the compulsory part of a task with varying duration and varying resource con- sumption							
KuchcinskiW03 KuchcinskiW03	Global approach to assignment and scheduling of complex behaviors based on HCDG and constraint programming							
Tsang03 Tsang03	Constraint Based Scheduling: Applying Constraint Programming to Scheduling Problems							
LorigeonBB02 LorigeonBB02	A dynamic programming algorithm for scheduling jobs in a two-machine open shop with an availability constraint							
Timpe02 Timpe02	Solving planning and scheduling problems with combined integer and constraint programming							
MartinPY01 MartinPY01	Cane Railway Scheduling via Constraint Logic Programming: Labelling Order and Constraints in a Real-Life Application							
Mason01 Mason01	Elastic Constraint Branching, the Wedelin/Carmen Lagrangian Heuristic and Integer Programming for Personnel Scheduling							
ArtiguesR00 ArtiguesR00	A polynomial activity insertion algorithm in a multi- resource schedule with cumulative constraints and mul- tiple modes							
BaptisteP00 BaptisteP00	Constraint Propagation and Decomposition Techniques for Highly Disjunctive and Highly Cumulative Project Scheduling Problems	CLAIRE	n		n		RCCSP	cumulative
HeipckeCCS00 Heipck- eCCS00	Scheduling under Labour Resource Constraints	COME SchedEns	dead		n	-		
KorbaaYG00 KorbaaYG00	Solving Transient Scheduling Problems with Constraint Programming							
LopezAKYG00 LopezA- KYG00	Discussion on: 'Solving Transient Scheduling Problems with Constraint Programming' by O. Korbaa, P. Yim, and JC. Gentina							
SakkoutW00 SakkoutW00	Probe Backtrack Search for Minimal Perturbation in Dynamic Scheduling	Cplex ECLiPSe	n		n	-	KRFP	
SchildW00 SchildW00 BensanaLV99 Ben-	Scheduling of Time-Triggered Real-Time Systems Earth Observation Satellite Management	OZ Ilog Solver	n ?		n	-		disjunctive
sanaLV99		nog porver	•		-	-		
BelhadjiI98 BelhadjiI98	Temporal Constraint Satisfaction Techniques in Job Shop Scheduling Problem Solving	-	n		n	-	TCSP JSSP	
PapaB98 PapaB98	Resource Constraints for Preemptive Job-shop Scheduling	Ilog Solver Claire	dead		-	-	PJSSP	disjunctive flow
Darby-DowmanLMZ97 Darby-DowmanLMZ97	Constraint Logic Programming and Integer Programming Approaches and Their Collaboration in Solving an Assignment Scheduling Problem	Cplex ECLiPSe	n		n	-	MGAP	now
FalaschiGMP97 FalaschiGMP97	Constraint Logic Programming with Dynamic Scheduling: A Semantics Based on Closure Operators							
Zhou97 Zhou97	A Permutation-Based Approach for Solving the Job-Shop Problem	-	n		n	[414]	JSSP	sort alldifferent permutation

Table 5: Manually Defined Article Properties

Key	Title	CP System	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints
Wallace96 Wallace96 Tay92 Tay92	Practical Applications of Constraint Programming COPS: A Constraint Programming Approach to Resource-Limited Project Scheduling	-	-		-	-	Survey	
DincbasSH90 DincbasSH90	Solving Large Combinatorial Problems in Logic Programming							

Table 6: Automatically Extracted Article Properties (Requires Local Copy)												
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm			
AbohashimaEG21 [2]	resource, scheduling, setup-time, order, machine, cmax, transportation	parallel machine	cycle	Python	Gurobi			https://, generated instance, github, real-world				
AbreuN22 [89]	transportation, batch process, flow-time, make-span, setup-time, open-shop, job, distributed, order, job-shop, cmax, flow-shop, machine, resource, completion-time, tardiness, scheduling, task, preempt, inventory	Open Shop Scheduling Problem, OSSP, single machine	noOverlap, cycle, cumulative	Python	Cplex, CHIP, OZ	medical		benchmark, real-world, http://, https://				
AkramNHRSA23 [7]	preempt, scheduling, distributed, machine, task, order, resource, completion-time		cycle, bin- packing	Python	OR-Tools	agriculture, medical		https://, bench- mark				
ArtiguesR00 [17]	no preempt, preempt, machine, activity, resource, transportation, re-scheduling, earliness, scheduling, precedence, makespan, completion-time, releasedate, due-date, job-shop, job, cmax, setup-time, lateness, order	RCPSP	cumulative, cy- cle, disjunctive		OZ							
AstrandJZ20 [22]	job, setup-time, order, task, completion-time, machine, ac- tivity, re-scheduling, job-shop, precedence, make-span, flow- shop, open-shop, resource, due- date, scheduling	parallel ma- chine, RCPSP	disjunctive, alldifferent, cycle	C++	OZ, Gecode	robot	mineral in- dustry, potash industry, mining industry	real-life, https://, bench- mark, http://, real-world				
BaptisteB18 [26]	job, order, task, preempt, ma- chine, manpower, lazy clause generation, scheduling, prece- dence, make-span, resource	parallel ma- chine, RCPSP, psplib	bin-packing, cu- mulative		СНІР			http://	time-tabling, edge-finding, edge-finder			
BaptisteP00 [29]	task, preempt, release-date, activity, re-scheduling, scheduling, job-shop, precedence, makespan, flow-shop, resource, duedate, job, cmax, order	RCPSP	disjunctive, cu- mulative	C++	Ilog Scheduler, Claire, CHIP			http://, benchmark	energetic rea soning, edge finder, edge finding			
BartakS11 [34]	multi-agent, order, distributed, task, resource, scheduling		cumulative		OPL			real-life, real- world, ran- dom instance, http://				
BeldiceanuCDP11 [43]	$ \begin{array}{c} task, resource, scheduling, order, \\ preempt, cmax \end{array} $		diffn, geost, disjunctive, cumulative, bin-packing	Prolog	CHIP, SICStus	perfect-square, rectangle- packing		http://, benchmark	energetic rea soning, edge finding, sweep			
BelhadjiI98 [46]	job-shop, precedence, resource, scheduling, job, order, task, preempt, release-date, due-date, machine	JSSP, Temporal Constraint Sat- isfaction Prob- lem, TCSP	disjunctive					real-life				
BenediktMH20 [48]	preempt, re-scheduling, task, or- der, scheduling, job, job-shop, machine	single machine	endBeforeStart, noOverlap		Gurobi	robot		generated instance, bench- mark, ran- dom instance, https://, github				
BensanaLV99 [51]	order		cycle		Cplex, Ilog Solver	satellite, earth observation		benchmark, http://				

		Table 6: A	utomatically Extra	cted Article Proper	ties (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
Caballero23 [71]	resource, scheduling	RCPSP						https://, http://	
CampeauG22 [72]	task, completion-time, make- span, job, order, scheduling, re- source, activity, precedence	RCPSP, RCP- SPDC	cumulative, endBeforeStart, cycle, alwaysIn, noOverlap	Python	OZ, Cplex		mining industry	real-life, real-world, https://	edge-finding
Darby- DowmanLMZ97 [86]	make-span, resource, task, machine, order, scheduling	MGAP, single machine	disjunctive, span constraint	Prolog	Cplex, ECLiPSe	pipeline, air- craft		real-world, benchmark, http://, real-life	
DincbasSH90 [101]	machine, resource, scheduling, precedence, distributed, job-shop, job, order, task		circuit, disjunc- tive	Prolog	OPL, CHIP			real-life	
EscobetPQPRA19 [110]	release-date, resource, dis- tributed, scheduling, job-shop, activity, order, batch process, machine, due-date, task, job		alternative con- straint, noOver- lap, circuit, cy- cle		Cplex, OPL	dairy, energy- price	manufacturing industry, food industry	https://, http://	
EvenSH15a [112]	order, transportation, dis- tributed, task, completion-time, preempt, resource, machine, scheduling	SCC	cumulative, dis- junctive	Java	Choco Solver, OPL			real-life, real-world, http://	sweep
FahimiOQ18 [113]	batch process, scheduling, resource, preempt, setup-time, machine, sequence dependent setup, lazy clause generation, distributed, due-date, task, job-shop, completion-time, make-span, precedence, openshop, job, lateness, order	psplib, RCPSP	alldifferent, dis- junctive, cumu- lative		Choco Solver			benchmark, https://, ran- dom instance	not-first, edge- finding, sweep, not-last, time- tabling
FalaschiGMP97 [114] FanXG21 [115]	order, scheduling job-shop, order, distributed, pre- empt, flow-shop, flow-time, task, tardiness, make-span, setup-	single machine, parallel machine	cycle	Prolog Python, Java	OZ, Cplex, Gurobi, ECLiPSe	semiconductor	manufacturing industry	https://, benchmark	max-flow
	time, no preempt, completion- time, precedence, earliness, resource, scheduling, machine, job. due-date, batch process				Echi Sc				
FetgoD22 [116]	cmax, resource, completion- time, scheduling, task, preempt, precedence, make-span, lazy clause generation, order	CuSP, RCPSP	cumulative	Python, Java	OZ, Choco Solver, CHIP			http://, https://, real-world, benchmark	sweep, not-last, edge-finding, time-tabling, edge-finder, not- first, energetic reasoning
GarridoAO09 [126]	order, task, resource, scheduling, precedence, make-span, rescheduling		disjunctive	Java	Choco Solver, OPL, CPO			benchmark, http://	O
GarridoOS08 [127]	order, task, machine, activity, resource, scheduling, make-span			C , Java	CPO, Choco Solver			http://, real- world	
GedikKEK18 [132]	job, tardiness, order, transporta- tion, scheduling, resource, due- date, preempt, machine, se- quence dependent setup, cmax, task, completion-time, make- span, setup-time	single ma- chine, parallel machine, PMSP	cumulative, noOverlap		OZ, Cplex	medical, nurse	manufacturing industry	http://, benchmark, https://	

Table 6: Automatically Extracted Article Properties (Requires Local Copy)											
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm		
GoelSHFS15 [144]	scheduling, resource, machine, precedence, transportation, task, setup-time, order, activity, in- ventory		disjunctive, cumulative, noOverlap, alwaysIn		OPL, CPO, Cplex	pipeline		http://			
GrimesIOS14 [152]	due-date, scheduling, order, task, preempt, completion-time, machine, activity, re-scheduling, distributed, resource		disjunctive		CHIP, Cplex	real-time pricing, energy- price, HVAC		real-life, http://, real- world			
GurPAE23 [157]	distributed, order, inventory, machine, resource, re-scheduling, scheduling	OSP	cumulative		OPL, Cplex, OZ	patient, physician, COVID, nurse		https://, real- life			
HachemiGR11 [158]	activity, resource, transporta- tion, scheduling, job-shop, prece- dence, job, make-span, order, task		cycle, alldiffer- ent		OPL, Cplex, Ilog Scheduler	forestry, crew- scheduling	food industry				
HeinzNVH22 [169]	order, sequence dependent setup, flow-shop, scheduling, resource, distributed, machine, completion-time, activity, prece- dence, job, task, re-scheduling, preempt, make-span, setup-time	parallel machine	alternative constraint, cumulative, noOverlap		Gurobi	crew- scheduling, robot		benchmark, real-world, https://, gitlab, generated in- stance, http://			
HeinzSB13 [168]	completion-time, precedence, or- der, due-date, preempt, resource, release-date, machine, schedul- ing, job	single machine, RCPSP, psplib	cumulative, dis- junctive		CHIP, Cplex, MiniZinc	satellite		benchmark, http://	time-tabling, edge-finding		
HeinzSSW12 [166]	task, order, inventory		bin-packing		Cplex	steel mill	process in- dustry, steel industry	http://, real- world			
HeipckeCCS00 [171]	precedence, release-date, pre- empt, due-date, scheduling, job- shop, machine, task, activ- ity, order, resource, make-span, completion-time, job	RCPSP, single machine	disjunctive, cu- mulative				, ,	http://, instance generator, benchmark			
Hooker05 [178]	make-span, job, distributed, order, release-date, machine, resource, due-date, tardiness, scheduling, task, precedence		cumulative, dis- junctive, circuit		OPL, Cplex, Ilog Scheduler			random instance	edge-finding		
Hooker06 [180]	due-date, job, machine, make- span, order, precedence, release- date, resource, scheduling, tardi- ness, task		circuit, cumula- tive, disjunctive		Cplex, Ilog Scheduler, OPL			http://, random instance			
HubnerGSV21 [184]	activity, cmax, completion- time, due-date, inventory, job, machine, make-span, order, precedence, preempt, resource, scheduling, tardiness, task, transportation	RCPSP, RCP- SPDC	alternative con- straint, cumula- tive, cycle, end- BeforeStart	С	Cplex, Gurobi, OPL	automotive		benchmark, http://, https://, real- life			
IsikYA23 [186]	batch process, cmax, completion-time, distributed, due-date, earliness, flow-shop, job, job-shop, machine, makespan, order, precedence, prempt, release-date, resource, scheduling, sequence dependent setup, setup-time, tardiness, task, transportation	parallel ma- chine, single machine	circuit, cumula- tive, endBefor- eStart, noOver- lap		Cplex, OPL, OZ	medical, robot	steel industry	benchmark, generated in- stance, http://, https://, real- life, real-world	energetic reasoning		

					ties (Requires Local	FJ)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
Kameugne15 [191]	completion-time, preempt, resource, scheduling, task		cumulative					http://	edge-finding, not-first, not- last
KameugneFSN14 [195]	completion-time, job, job-shop, make-span, order, precedence, preempt, release-date, resource, scheduling, task	CuSP, RCPSP, psplib	cumulative, dis- junctive		CHIP, Gecode			benchmark, http://, random instance	edge-finder, edge-finding, energetic rea- soning, not- first, not-last, time-tabling
KelbelH11 [198]	completion-time, distributed, due-date, earliness, inven- tory, job, job-shop, machine, make-span, order, precedence, preempt, release-date, resource, scheduling, tardiness, task	JSSP	cumulative, dis- junctive		Cplex, Ilog Solver, OPL			benchmark, generated in- stance, http://, random instance	edge-finder, edge-finding
KhayatLR06 [200]	activity, cmax, due-date, job, job-shop, machine, make-span, order, precedence, preempt, resource, scheduling, setup-time, task				Cplex, OPL			benchmark, http://, real-life	
KoehlerBFFHPSSS21 [205	flow-shop, flow-time, job, job- shop, lateness, machine, make- span, order, precedence, re- source, scheduling, tardiness, task	CTW, OSP, single machine	alldifferent, circuit, cumu- lative, cycle, disjunctive	C , Python	Chuffed, Cplex, Gurobi, MiniZ- inc, OPL, OR- Tools, Z3	automotive, cable tree, robot		benchmark, github, http://, https://, real- world	
KorbaaYG00 [207]									
KovacsB08 [209]	activity, completion-time, job, machine, order, preempt, release-date, resource, schedul- ing, tardiness	single machine	bin-packing, cu- mulative, cycle, disjunctive		Ilog Scheduler, Ilog Solver	aircraft		benchmark	sweep
KovacsB11 [210]	activity, completion-time, dis- tributed, due-date, earliness, flow-shop, flow-time, job, job- shop, machine, make-span, order, precedence, preempt, release-date, resource, schedul- ing, tardiness	parallel ma- chine, single machine	cumulative, cy- cle, disjunctive	C++	Ilog Scheduler, Ilog Solver			benchmark	edge-finding
KovacsK11 [212]	completion-time, due-date, ear- liness, flow-shop, job, job-shop, machine, order, release-date, re- source, scheduling, sequence de- pendent setup, tardiness, task, transportation	single machine	cycle	C++	Cplex, Gecode, Ilog Solver			http://	
KreterSS17 [217]	activity, completion-time, lazy clause generation, machine, make-span, order, precedence, preempt, resource, scheduling, task	OSP, RCPSP, parallel machine	alwaysIn, cumulative, cycle, diffn		CHIP, CPO, Chuffed, Cplex, MiniZinc			benchmark, http://	edge-finding
KuchcinskiW03 [218]	distributed, order, precedence, resource, scheduling		circuit, cycle	Java	CHIP	pipeline		benchmark	

Table 6: Automatically Extracted Article Properties (Requires Local Copy)											
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm		
LaborieRSV18 [222]	activity, batch process, distributed, due-date, earliness, flow-shop, inventory, job, job-shop, machine, make-span, manpower, order, precedence, re-scheduling, release-date, resource, scheduling, sequence dependent setup, setup-time, tardiness, task, transportation	OSP, RCPSP, parallel ma- chine, psplib	alternative constraint, alwaysIn, cu- mulative, cycle, disjunctive, endBeforeStart, noOverlap, span constraint	C , C++, Java, Python	CHIP, CPO, Choco Solver, Cplex, Gecode, Ilog Scheduler, Ilog Solver, OPL	aircraft, con- tainer terminal, pipeline, rail- way, robot, satellite, semi- conductor	chemical in- dustry, petro- chemical indus- try	benchmark, http://, https://, real- world	edge-finding		
LacknerMMWW23 [224]	batch process, due-date, earliness, job, job-shop, lateness, machine, make-span, order, release-date, scheduling, setup-time, tardiness, task	OSP, parallel machine, single machine	alternative constraint, bin-packing, cumulative, disjunctive, endBeforeStart, noOverlap		CPO, Chuffed, Cplex, Gurobi, MiniZinc, OPL, OR-Tools	oven scheduling, semiconductor	electronics industry, man- ufacturing industry, steel industry	benchmark, http://, https://, in- dustrial part- ner, instance generator, ran- dom instance, real-life, zenodo	time-tabling		
LetortCB15 [230]	job, machine, make-span, order, precedence, resource, scheduling, task	psplib	bin-packing, cu- mulative, cycle	Java, Prolog	CHIP, Choco Solver, SICStus			benchmark, generated in- stance, http://, random instance	edge-finding, energetic rea- soning, sweep		
LiessM08 [232]	activity, cmax, job, job-shop, machine, make-span, order, precedence, preempt, resource, scheduling, task	RCPSP, psplib	cumulative, dis- junctive	C++	OZ			benchmark, http://	edge-finding		
LimtanyakulS12 [237]	activity, completion-time, duedate, job, machine, order, precedence, release-date, resource, scheduling, tardiness		bin-packing, cumulative, dis- junctive, table constraint		Cplex, Ilog Scheduler, OZ	automotive, robot	automotive industry	benchmark, generated in- stance, http://, industrial part- ner, random instance, real- life	edge-finding, energetic rea- soning, not- first, not-last		
LombardiM12 [245]	activity, completion-time, distributed, due-date, earliness, flow-shop, inventory, job, job-shop, lazy clause generation, machine, make-span, manpower, order, precedence, preempt, re-scheduling, resource, scheduling, sequence dependent setup, setup-time, tardiness, task, transportation	RCPSP, parallel machine, psplib	circuit, cumula- tive, cycle, dis- junctive		OR-Tools, OZ	aircraft	chemical industry	benchmark, real-world	edge-finding, energetic rea- soning		
LopesCSM10 [246]	activity, distributed, due-date, inventory, job, job-shop, make-span, order, precedence, rescheduling, resource, scheduling, stock level, task, transportation	OSP	alldifferent, cycle, disjunctive, table constraint	C++	Ilog Scheduler, Ilog Solver, OPL, OZ	pipeline	oil industry	benchmark, http://, real- world	max-flow		
LopezAKYG00 [247] LunardiBLRV20 [249]	activity, completion-time, due-date, flow-shop, job, job-shop, machine, make-span, order, precedence, preempt, rescheduling, resource, scheduling, setup-time, tardiness	FJS	endBeforeStart, noOverlap	Python	Cplex			benchmark, generated in- stance, github, https://, ran- dom instance			

		Table 6: A	utomatically Extra	cted Article Proper	ties (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
MartinPY01 [258]	machine, order, re-scheduling, resource, scheduling, task, transportation		circuit	Prolog	ECLiPSe, Ilog Solver	aircraft, railway		real-life	
Mason01 [259]	activity, order, scheduling, task, transportation				Cplex, OPL, OZ	crew- scheduling, nurse, railway		http://	
MengZRZL20 [262]	batch process, cmax, completion-time, distributed, earliness, flow-shop, flow-time, job, job-shop, machine, makespan, no preempt, open-shop, order, precedence, preempt, resource, scheduling, sequence dependent setup, setup-time, tardiness, task, transportation	FJS, OSP, Open Shop Scheduling Problem, paral- lel machine	alternative constraint, end- BeforeStart, noOverlap		Cplex, Gecode, Gurobi, OPL, OR-Tools	robot, semicon- ductor		benchmark, https://, sup- plementary material	
MontemanniD23 [268]	distributed, machine, order, resource, scheduling, task	OSP	circuit	Python	CHIP, Gurobi, OPL, OR-Tools	robot		benchmark, https://, sup- plementary material	
MontemanniD23a [267]	completion-time, order, scheduling, task, transportation		circuit	Python	OR-Tools			benchmark, http://, https://	
MullerMKP22 [272]	activity, batch process, cmax, completion-time, due-date, job, job-shop, machine, make-span, order, precedence, preempt, resource, scheduling, setup-time, task	FJS, OSP	circuit, disjunctive	Java, Python	Choco Solver, Chuffed, Cplex, Gecode, MiniZ- inc, OPL, OR-Tools, OZ	robot, semicon- ductor		benchmark, github, https://, ran- dom instance, real-world	
NattafAL15 [276]	activity, due-date, make-span, order, preempt, release-date, re- source, scheduling, task	CECSP, CuSP, RCPSP	cumulative	C++	Cplex			generated instance, http://	energetic reasoning, sweep
NattafAL17 [277]	activity, job, make-span, order, release-date, resource, schedul- ing, task	CECSP	cumulative, dis- junctive	C++	Cplex			http://, real- world	edge-finding, energetic rea- soning
NovaraNH16 [283]	activity, batch process, completion-time, due-date, earliness, job, machine, make-span, manpower, order, precedence, re-scheduling, resource, scheduling, sequence dependent setup, setup-time, tardiness, task		alternative constraint, cumulative, disjunctive, endBeforeStart, noOverlap		Cplex, OPL		pharmaceutical industry	benchmark, http://	Ü
Novas19 [284]	activity, cmax, completion-time, distributed, due-date, flow-shop, flow-time, inventory, job, job-shop, lateness, machine, makespan, order, precedence, releasedate, resource, scheduling, sequence dependent setup, setup-time, tardiness, task, transportation	FJS, parallel machine	cumulative, cycle, end- BeforeStart, noOverlap		Cplex, OPL, OZ	medical, robot, semiconductor		benchmark, https://	

		Table 6: A	utomatically Extra	cted Article Proper	ties (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
NovasH10 [285]	activity, batch process, completion-time, due-date, earliness, job, lateness, machine, make-span, manpower, order, precedence, re-scheduling, resource, scheduling, setup-time, tardiness, task				Ilog Scheduler, OPL, OZ	pipeline		http://	
NovasH12 [286]	activity, completion-time, job, machine, make-span, order, precedence, resource, schedul- ing, task, transportation		cycle		Ilog Scheduler, Ilog Solver, OPL, OZ	container terminal, electroplating, hoist, robot, semiconductor			
NovasH14 [287]	activity, buffer-capacity, completion-time, job, job-shop, machine, make-span, order, precedence, resource, scheduling, task, transportation	parallel ma- chine, single machine			Ilog Scheduler, Ilog Solver, OPL	robot		benchmark, http://	
OzturkTHO13 [293]	activity, cmax, completion- time, flow-shop, job, machine, make-span, order, precedence, preempt, resource, scheduling, setup-time, task	SBSFMMAL	cumulative, cy- cle, disjunctive		CHIP, Cplex, Ilog Solver, OPL, OZ			http://, real- life, real-world	edge-finding
PandeyS21a [294]	activity, completion-time, dis- tributed, flow-shop, job, ma- chine, make-span, order, prece- dence, re-scheduling, resource, scheduling, task	PMSP, parallel machine, single machine	alternative constraint, cumulative, endBeforeStart		Cplex, OPL, OZ	$\operatorname{semiconductor}$		benchmark, https://	
PapaB98 [296]	activity, cmax, completion-time, distributed, due-date, flow- shop, job, job-shop, machine, make-span, order, preempt, re- scheduling, resource, scheduling, setup-time, task	JSSP, OSP, PJSSP	cumulative, dis- junctive, table constraint	C++	CHIP, Claire, Ilog Solver	hoist		benchmark, http://	edge-finder, edge-finding, energetic rea- soning
PoderBS04 [304]	activity, due-date, machine, order, precedence, preempt, producer/consumer, release-date, resource, scheduling, task	RCPSP	cumulative	Prolog	CHIP		chemical indus- try	http://	
PohlAK22 [305]	activity, completion-time, earliness, inventory, job, lateness, machine, order, precedence, re-scheduling, release-date, resource, scheduling, sequence dependent setup, setup-time, tardiness, transportation	SCC, single machine	cumulative, noOverlap	Python	Cplex, Gurobi, OZ	aircraft		benchmark, http://, https://, real- world	
PourDERB18 [308]	job, machine, order, scheduling, task, transportation				CHIP, Cplex, OR-Tools	crew- scheduling, railway		benchmark, generated in- stance, http://, real-life, real- world	

		Table 6: A	utomatically Extra	cted Article Proper	ties (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
PrataAN23 [312]	activity, batch process, completion-time, distributed, due-date, earliness, flow-shop, flow-time, inventory, job, job-shop, lateness, machine, make-span, open-shop, order, precedence, preempt, re-scheduling, release-date, resource, scheduling, sequence dependent setup, setup-time, tardiness, task	Open Shop Scheduling Problem, par- allel machine, single machine	circuit, cumula- tive		CHIP, OZ	aircraft, dairy, energy-price, robot	manufacturing industry	benchmark, http://, https://, real- life, real-world	time-tabling
QinDCS20 [315]	activity, cmax, completion-time, job, machine, make-span, order, precedence, resource, schedul- ing, setup-time, tardiness, task, transportation	parallel machine	cycle, endBefor- eStart, noOver- lap		Cplex, OPL	container termi- nal, yard crane		benchmark, https://, real- life	
QinWSLS21 [314]	batch process, cmax, completion-time, flow-shop, job, job-shop, lateness, machine, make-span, order, preempt, scheduling, tardiness	OSP, single machine		C++	CHIP, Cplex, OPL, OZ	agriculture, semiconductor		https://	
SacramentoSP20 [322]	activity, completion-time, distributed, flow-shop, job, job-shop, machine, make-span, open-shop, order, precedence, preempt, resource, scheduling, task, transportation	Open Shop Scheduling Problem, paral- lel machine	alternative constraint, cumulative, disjunctive, endBeforeStart, noOverlap	Java	CPO, Cplex, OZ	container termi- nal		benchmark, https://, real- life, real-world, zenodo	
SakkoutW00 [325]	activity, distributed, job, job- shop, machine, order, prece- dence, preempt, re-scheduling, resource, scheduling, task, trans- portation	KRFP, single machine	bin-packing, disjunctive		CHIP, Cplex	aircraft		benchmark, http://, real- world	edge-finder, edge-finding
SchausHMCMD11 [326]	order, task	SCC	bin-packing			steel mill	steel industry	benchmark, generated in- stance, http://	
SchildW00 [327]	completion-time, distributed, flow-shop, job, job-shop, ma- chine, order, precedence, re- source, scheduling, task	OSP, single machine	bin-packing, cy- cle, disjunctive		Ilog Solver, OZ	automotive	aerospace industry, automotive industry	http://	edge-finding, time-tabling
SchuttFSW11 [332]	activity, completion-time, lazy clause generation, machine, make-span, open-shop, order, precedence, preempt, resource, scheduling, task	RCPSP, TMS, psplib	circuit, cu- mulative, dis- junctive, span constraint		CHIP, ECLiPSe, Ilog Scheduler, OZ, SICStus			benchmark, http://, real- world	edge-finder, edge-finding, not-first, not last
ShinBBHO18 [338]	activity, inventory, job, machine, order, preempt, resource, scheduling, task, transportation	OSP				medical, nurse, patient, physi- cian		github, http://, https://, real- world	
Siala15 [339]	resource, scheduling		disjunctive					benchmark, http://	
SimoninAHL15 [342]	activity, inventory, make-span, order, precedence, preempt, re- source, scheduling, task, trans- portation		cumulative, cy- cle, disjunctive, span constraint		СНІР	earth observa- tion, pipeline, robot, satellite		• , ,	sweep

		Table 6: A	Automatically Extra	cted Article Proper	ties (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
Simonis07 [344]	activity, batch process, bill of material, due-date, job, job- shop, machine, make to or- der, order, producer/consumer, re-scheduling, release-date, re- source, scheduling, sequence de- pendent setup, setup-time, task, transportation	OSP	alldifferent, bin-packing, cumulative, cycle, diffn, disjunctive	Prolog	CHIP, Ilog Scheduler, OPL, OZ	aircraft, medi- cal, nurse, pa- tient			bi-partite matching, sweep, time- tabling
SubulanC22 [347]	BOM, activity, completion-time, due-date, inventory, machine, make-span, order, precedence, preempt, resource, scheduling, tardiness, task, transportation	RCPSP	cumulative, endBeforeStart		Cplex, OPL, OZ	offshore		benchmark, https://, real- life, real-world	
Timpe02 [362]	activity, due-date, inventory, job, machine, make-span, order, producer/consumer, resource, scheduling, setup-time, stock level, task		cumulative, cy- cle, diffn, dis- junctive	C++	CHIP, Cplex		chemical indus- try, process in- dustry	http://	
TopalogluO11 [364]	distributed, order, preempt, re-scheduling, scheduling, task, transportation	OSP			Cplex, Ilog Solver, OPL, OZ	medical, nurse, patient, physi- cian		http://, real-life	time-tabling
TrojetHL11 [367]	activity, completion-time, distributed, due-date, job, job-shop, machine, make-span, order, precedence, resource, scheduling, task	RCPSP	alldifferent, cumulative, cycle, diffn, disjunctive	Prolog	CHIP, OZ, SIC-Stus	robot		http://, real-world	
Tsang03 [368] VilimBC05 [384]	resource, scheduling activity, batch process, completion-time, distributed, job, job-shop, machine, make- span, open-shop, order, prece- dence, resource, scheduling, sequence dependent setup, setup-time, task		cumulative, cy- cle, disjunctive					real-life benchmark, http://, real-life	time-tabling edge-finding, not-first, not- last, sweep
VlkHT21 [387]	completion-time, distributed, due-date, order, precedence, resource, scheduling, tardiness	PMSP	alternative constraint, noOverlap		Cplex, Gurobi, OPL, Z3	automotive, robot		benchmark, github, http://, https://, indus- trial partner, random instance	
Wallace96 [388]	activity, distributed, job, job- shop, machine, multi-agent, or- der, resource, scheduling, task, transportation	OSP	circuit, cycle, disjunctive	Lisp, Prolog	CHIP, ECLiPSe, Ilog Solver, OPL, OZ	aircraft, auto- motive, railway, robot	automotive in- dustry, process industry	http://	time-tabling
WallaceY20 [389]	flow-shop, job, job-shop, lazy clause generation, machine, or- der, resource, scheduling, task, transportation	CHSP	circuit, cumula- tive, cycle, dis- junctive		Chuffed, Cplex, Gecode, Gurobi, MiniZinc, OPL	container terminal, electroplating, hoist, robot, yard crane		benchmark, http://, https://, ran- dom instance, real-life, real- world	edge-finding, time-tabling
WangMD15 [392]	activity, cmax, completion-time, job, job-shop, make-span, or- der, precedence, re-scheduling, resource, scheduling, task	OSP	cumulative, noOverlap		Cplex, OPL, OZ	medical, nurse, patient, physi- cian		http://, https://, real- life, real-world	time-tabling

		Table 6: A	utomatically Extra	cted Article Proper	ties (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
WikarekS19 [395]	cmax, distributed, flow-shop, inventory, job, job-shop, ma- chine, make-span, manpower, multi-agent, order, precedence, preempt, resource, scheduling, setup-time, task	JSSP, RCPSP	cumulative, dis- junctive		ECLiPSe, OZ, Z3	robot			
YuraszeckMCCR23 [406]	activity, batch process, cmax, flow-shop, flow-time, job, job- shop, machine, make-span, open-shop, order, precedence, preempt, resource, scheduling, setup-time, task	FJS, JSSP, OSSP, Open Shop Schedul- ing Problem, RCPSP	cumulative, endBeforeStart		Cplex, OPL		pharmaceutical industry	benchmark, github, https://, real- world	
ZarandiKS16 [407]	completion-time, distributed, due-date, earliness, flow-shop, job, job-shop, machine, make- span, order, preempt, resource, scheduling, tardiness, task, transportation	single machine			Ilog Solver	robot		real-world	time-tabling
ZeballosH05 [408]	activity, buffer-capacity, completion-time, due-date, job, machine, make-span, order, precedence, resource, scheduling, tardiness, task, transportation				Ilog Scheduler, Ilog Solver, OPL	robot		http://	
ZeballosQH10 [409]	activity, cmax, completion-time, due-date, earliness, job, job- shop, machine, make-span, or- der, precedence, preempt, re- source, scheduling, tardiness, task, transportation				CHIP, Cplex, ECLiPSe, Ilog Scheduler, Ilog Solver, OPL, OZ	robot		benchmark, http://, real- world	
ZhangW18 [412]	completion-time, distributed, earliness, flow-shop, flow-time, job, job-shop, lateness, machine, make-span, multi-agent, order, precedence, preempt, re-scheduling, resource, scheduling, setup-time, tardiness, transportation	FJS, OSP	cumulative, noOverlap		Cplex, OPL, Z3	robot		benchmark, http://	
ZhangYW21 [411]	activity, batch process, cmax, distributed, job, job-shop, ma- chine, make-span, multi-agent, order, precedence, preempt, re-scheduling, release-date, re- source, scheduling, setup-time, task	RCPSP	disjunctive, endBeforeStart		Cplex	robot		benchmark, https://	
Zhou97 [415]	completion-time, due-date, job, job-shop, machine, order, precedence, preempt, release-date, scheduling, task		cumulative, dis- junctive	Prolog	CHIP, Ilog Scheduler, Z3			benchmark	edge-finder, edge-finding
abs-0907-0939 [302]	activity, due-date, make-span, order, preempt, release-date, re- source, scheduling, task		cumulative	Java	CHIP, Choco Solver			http://, real- world	edge-finding, energetic rea soning, sweep
abs-1901-07914 [41]	distributed, machine, make- span, multi-agent, order, re- source, scheduling, task			Python	MiniZinc, OR- Tools, OZ	robot		benchmark, github, http://, https://, real- world	J, 1

		Table 6: A	utomatically Extra	cted Article Propert	ies (Requires Local	Copy)			
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
abs-1902-01193 [8]	BOM, activity, order, resource, scheduling, task	OSP		C++, Prolog, Python	CHIP, Ilog Solver, OPL	medical, nurse			time-tabling
abs-1902-09244 [160]	activity, completion-time, due- date, earliness, flow-shop, in- ventory, job, job-shop, machine, make-span, order, precedence, release-date, resource, schedul- ing, setup-time, tardiness, task, transportation	FJS, RCPSP	cumulative, cycle, endBefor- eStart		Cplex, OPL, OZ	aircraft	food-processing industry, steel industry	benchmark, https://, in- dustry partner, real-world	
abs-1911-04766 [134]	activity, completion-time, duedate, job, make-span, order, precedence, re-scheduling, release-date, resource, scheduling, task	RCPSP	alternative constraint, cumulative, disjunctive, endBeforeStart, noOverlap	Java	CPO, Chuffed, Cplex, Gecode, MiniZinc, OZ	automotive		benchmark, generated instance, github, http://, https://, indus- trial partner, instance gener- ator, real-life, real-world	time-tabling
abs-2211-14492 [348]	activity, cmax, completion-time, distributed, due-date, flow-shop, job, job-shop, machine, make- span, order, precedence, re- source, scheduling, setup-time, tardiness, task, transportation	single machine	bin-packing, cumulative, disjunctive	Python	Cplex, OR- Tools, OZ	semiconductor		benchmark, generated in- stance, https://, random instance	
abs-2305-19888 [170]	activity, cmax, completion-time, distributed, flow-shop, job, ma- chine, make-span, order, prece- dence, preempt, re-scheduling, resource, scheduling, sequence dependent setup, setup-time, task	parallel machine	alternative constraint, cumulative, noOverlap		Gurobi	robot		benchmark, generated instance, git- lab, http://, https://, real- world	
abs-2306-05747 [356]	completion-time, flow-shop, flow-time, job, job-shop, machine, make-span, order, precedence, preempt, re-scheduling, resource, scheduling, tardiness, task	JSSP	cumulative, disjunctive, noOverlap	Java	Choco Solver			benchmark, github, https://, indus- trial instance, real-world, supplementary material	
abs-2312-13682 [300]	activity, inventory, machine, make-span, order, re-scheduling, resource, scheduling, task, transportation	OSP	cumulative, ta- ble constraint		OPL	container terminal, nurse, steel mill		generated instance, real- world	
abs-2402-00459 [279]	completion-time, due-date, ear- liness, job, job-shop, machine, multi-agent, order, precedence, resource, scheduling, tardiness, task	single machine	bin-packing, cumulative, disjunctive		OPL, OR-Tools		mining industry	benchmark, generated instance, github, http://, https://, in- stance genera- tor, real-world	

4 Authors

Table 7: Co-Authors of Articles/Papers

Author	Entries
Andreas Schutt	YangSS19[402] KreterSS17[217] YoungFS17[403] GoldwaserS17[146] SchuttS16[333] SzerediS16[351] KreterSS15[216] EvenSH15[111] EvenSH15a[112] SchuttFS13[330] cpaior-SchuttFS13[329] GuSS13[156] SchuttCSW12[328] SchuttFSW11[332] SchuttW10[334] SchuttFSW09[331]
Nicolas Beldiceanu	Madi-WambaLOBM17[252] Madi-WambaB16[251] LetortCB15[230] LetortCB13[229] LetortBC12[228] ClercqPBJ11[81] BeldiceanuCDP11[43] BeldiceanuCP08[44] PoderB08[303] BeldiceanuP07[45] PoderBS04[304] BeldiceanuC02[42] AggounB92[5]
J. Christopher Beck	TangB20[352] BoothNB16[65] KoschB14[208] HeinzSB13[168] HeinzKB13[165] HeinzB12[164] KovacsB11[210] BeckFW11[38] WatsonB08[393] KovacsB08[209] CarchraeBF05[74] WuBB05[401] BeckDF97[37]
Emmanuel Hebrard	JuvinHHL23[188] AntuoriHHEN21[11] GodetLHS20[143] SimoninAHL15[342] SialaAH15[340] BessiereHMQW14[53] SimoninAHL12[341] BillautHL12[54] GrimesH11[150] GrimesH10[149] GrimesHM09[151] HebrardTW05[162]
Peter J. Stuckey	YangSS19[402] DemirovicS18[95] KreterSS17[217] SchuttS16[333] KreterSS15[216] BurtLPS15[70] SchuttFS13[330] cpaior-SchuttFS13[329] GuSS13[156] SchuttCSW12[328] SchuttFSW11[332] SchuttFSW09[331]
Michele Lombardi	BonfiettiZLM16[64] LombardiBM15[241] BartoliniBBLM14[35] BonfiettiLM14[63] LombardiM12[245] BonfiettiLBM12[62] BonfiettiLBM11[61] LombardiBMB11[242] LombardiM10[244] LombardiM09[243] HoeveGSL07[373]
Pierre Lopez	JuvinHHL23[188] JuvinHL23[189] Polo-MejiaALB20[306] NattafAL17[277] SimoninAHL15[342] NattafAL15[276] SimoninAHL12[341] BillautHL12[54] LahimerLH11[225] TrojetHL11[367] LopezAKYG00[247]
Michela Milano	BonfiettiZLM16[64] LombardiBM15[241] BartoliniBBLM14[35] BonfiettiLM14[63] LombardiM12[245] BonfiettiLBM12[62] BonfiettiLBM11[61] LombardiBMB11[242] LombardiM10[244] LombardiM09[243] BeniniBGM06[50]
Petr Vilím	LaborieRSV18[222] VilimLS15[385] Vilim11[382] Vilim09[380] cpaior-Vilim09[381] VilimBC05[384] Vilim05[379] VilimBC04[383] Vilim04[378] Vilim03[377] Vilim02[376]
Christian Artigues	PovedaAA23[309] PohlAK22[305] Polo-MejiaALB20[306] NattafAL17[277] SimoninAHL15[342] NattafAL15[276] SialaAH15[340] SimoninAHL12[341] ArtiguesBF04[16] ArtiguesR00[17]
John N. Hooker	Hooker17[181] HechingH16[163] CireCH13[80] CobanH10[82] Hooker06[180] Hooker05[178] cp-Hooker05[179] Hooker04[177] HookerY02[182]
Claude-Guy Quimper	BoudreaultSLQ22[67] OuelletQ22[291] Mercier-AubinGQ20[263] FahimiOQ18[113] KameugneFGOQ18[192] OuelletQ18[290] GingrasQ16[141] BessiereHMQW14[53] OuelletQ13[289]
Pierre Schaus	CappartS17[73] CauwelaertDMS16[76] DejemeppeCS15[92] GayHLS15[128] GayHS15[129] cpaior-GayHS15[130] HoundjiSWD14[183] GaySS14[131] SchausHM-CMD11[326]
Pascal Van Hentenryck	FontaineMH16[117] EvenSH15[111] EvenSH15a[112] SchausHMCMD11[326] MonetteDH09[266] DoomsH08[102] HentenryckM08[173] HentenryckM04[172] DincbasSH90[101]
Philippe Baptiste	BaptisteB18[26] Baptiste09[25] BaptisteLPN06[27] ArtiouchineB05[18] BaptisteP00[29] PapaB98[296] BaptisteP97[28] PapeB97[295]
Mats Carlsson	WessenCS20[394] MossigeGSMC17[269] LetortCB15[230] LetortCB13[229] LetortBC12[228] BeldiceanuCDP11[43] BeldiceanuCP08[44] BeldiceanuCO2[42]
Nysret Musliu	LacknerMMWW23[224] WinterMMW22[396] LacknerMMWW21[223] GéibingerKKMMW21[133] GeibingerMM21[136] GeibingerMM19[135] abs-1911-04766[134] KletzanderM17[204]
Helmut Simonis	ArmstrongGOS22[14] ArmstrongGOS21[13] GrimesIOS14[152] IfrimOS12[185] Simonis07[344] SimonisC95[345] Simonis95[343] DincbasSH90[101]
Alessio Bonfietti	BonfiettiZLM16[64] Bonfietti16[60] LombardiBM15[241] BonfiettiLM14[63] BonfiettiLBM12[62] BonfiettiLBM11[61] LombardiBMB11[242]
Zdenek Hanzálek	Mehdizadeh-Somarin23[260] abs-2305-19888[170] HeinzNVH22[169] VlkHT21[387] BenediktMH20[48] BenediktSMVH18[49] KelbelH11[198]
Philippe Laborie	LunardiBLRV20[249] LaborieRSV18[222] Laborie18a[221] MelgarejoLS15[6] VilimLS15[385] Laborie09[220] BaptisteLPN06[27]
Gabriela P. Henning	NovaraNH16[283] NovasH14[287] NovasH12[286] NovasH10[285] ZeballosQH10[409] ZeballosH05[408] QuirogaZH05[317]
Stefan Heinz	HeinzSB13[168] HeinzKB13[165] HeinzSSW12[166] HeinzB12[164] HeinzS11[167] BertholdHLMS10[52]
András Kovács	KovacsB11[210] KovacsK11[212] KovacsB08[209] KovacsV06[214] KovacsEKV05[211] KovacsV04[213]
Emmanuel Poder	BeldiceanuCDP11[43] abs-0907-0939[302] BeldiceanuCP08[44] PoderB08[303] BeldiceanuP07[45] PoderBS04[304]
Mark Wallace	WallaceY20[389] He0GLW18[161] SchuttFSW09[331] SakkoutW00[325] RodosekW98[320] Wallace96[388]
Roman Barták	BartakS11[34] VilimBC05[384] VilimBC04[383] Bartak02[33] Bartak02a[32]
Yves Deville	HoundjiSWD14[183] DejemeppeD14[93] SchausHMCMD11[326] MonetteDH09[266] MonetteDD07[265]
Thibaut Feydy	YoungFS17[403] SchuttFS13[330] cpaior-SchuttFS13[329] SchuttFSW11[332] SchuttFSW09[331]
Roger Kameugne	KameugneFND23[193] KameugneFGOQ18[192] Kameugne15[191] KameugneFSN14[195] KameugneFSN11[194]
Claude Le Pape	BaptisteLPN06[27] BaptisteP00[29] PapaB98[296] BaptisteP97[28] PapeB97[295]
Juan M. Novas	Novas19[284] NovaraNH16[283] NovasH14[287] NovasH12[286] NovasH10[285]
Louis-Martin Rousseau	DoulabiŘP16[104] PesantŘR15[301] DoulabiŘP14[103] ChapadosJR11[78] HachemiGR11[158]
André A. Ciré	CireCH13[80] LopesCSM10[246] MouraSCL08[271] MouraSCL08a[270]
Luca Benini	BonfiettiLBM12[62] BonfiettiLBM11[61] LombardiBMB11[242] BeniniBGM06[50]
Cyrille Dejemeppe	CauwelaertDMS16[76] Dejemeppe16[91] DejemeppeCS15[92] DejemeppeD14[93]
Steven Gay	GayHLS15[128] GayHS15[129] cpaior-GayHS15[130] GaySS14[131]
Tobias Geibinger	GeibingerKKMMW21[133] GeibingerMM21[136] GeibingerMM19[135] abs-1911-04766[134]

Table 7: Co-Authors of Articles/Papers

Author	Entries
Diarmuid Grimes	GrimesIOS14[152] GrimesH11[150] GrimesH10[149] GrimesHM09[151]
Krzysztof Kuchcinski	WolinskiKG04[399] WolinskiKG04a[400] KuchcinskiW03[218] GruianK98[155]
Laurent Michel	TardivoDFMP23[354] SchausHMCMD11[326] HentenryckM08[173] HentenryckM04[172]
Florian Mischek	GeibingerKKMMW21[133] GeibingerMM21[136] GeibingerMM19[135] abs-1911-04766[134]
Jean-Noël Monette	CauwelaertDMS16[76] SchausHMCMD11[326] MonetteDH09[266] MonetteDD07[265]
Margaux Nattaf	NattafM20[278] MalapertN19[254] NattafAL17[277] NattafAL15[276]
Barry O'Sullivan	ArmstrongGOS22[14] ArmstrongGOS21[13] GrimesIOS14[152] IfrimOS12[185]
Yanick Ouellet	OuelletQ22[291] FahimiOQ18[113] KameugneFGOQ18[192] OuelletQ18[290]
Gilles Pesant	AalianPG23[1] DoulabiRP16[104] PesantRR15[301] DoulabiRP14[103]
Thierry Petit	DerrienP14[97] DerrienPZ14[98] ClercqPBJ11[81] abs-0907-0939[302]
Christine Solnon	GroleazNS20[154] GroleazNS20a[153] SacramentoSP20[322] MelgarejoLS15[6]
Marek Vlk	abs-2305-19888[170] HeinzNVH22[169] VlkHT21[387] BenediktSMVH18[49]
József Váncza	KovacsV06[214] KovacsEKV05[211] KovacsV04[213] VanczaM01[374]
Felix Winter	LacknerMMWW23[224] WinterMMW22[396] LacknerMMWW21[223] GeibingerKKMMW21[133]
Armin Wolf	GeitzGSSW22[137] SchuttW10[334] WolfS05[398] Wolf03[397]
Max Åstrand	Astrand0F21[20] Astrand21[19] AstrandJZ20[22] AstrandJZ18[21]
Sévérine Betmbe Fetgo	KameugneFND23[193] FetgoD22[116] KameugneFGOQ18[192]
Miguel Bofill	BofillCSV17[57] BofillGSV15[59] BofillEGPSV14[58]
Cid C. de Souza	MouraSCL08[271] MouraSCL08a[270] HeipckeCCS00[171]
Sophie Demassey	HermenierDL11[174] BeldiceanuCDP11[43] Demassey03[94]
Alban Derrien	Derrien15[96] DerrienP14[97] DerrienPZ14[98]
Martin Gebser	TasselGS23[355] abs-2306-05747[356] KovacsTKSG21[215]
Jean-Claude Gentina	KorbaaYG00[207] LopezAKYG00[247] KorbaaYG99[206]
Renaud Hartert	GayHLS15[128] GayHS15[129] cpaior-GayHS15[130]
Brahim Hnich	GokgurHO18[145] OzturkTHO13[293] RossiTHP07[321]
Andrew J. Davenport	Davenport10[87] DavenportKRSH07[88] BeckDF97[37]
Mikael Johansson	Astrand0F21[20] AstrandJZ20[22] AstrandJZ18[21]
Narendra Jussien	ClercqPBJ11[81] ElkhyariGJ02[107] ElkhyariGJ02a[108]
Tamás Kis	KovacsK11[212] KeriK07[199] KovacsEKV05[211]
Ouajdi Korbaa	KorbaaYG00[207] LopezAKYG00[247] KorbaaYG99[206]
Arnaud Letort	LetortCB15[230] LetortCB13[229] LetortBC12[228]
Arnaud Malapert	NattafM20[278] MalapertN19[254] GrimesHM09[151]
Tony Minoru Tamura Lopes	LopesCSM10[246] MouraSCL08[271] MouraSCL08a[270]
Hiroki Nishikawa	NishikawaSTT19[282] NishikawaSTT18[280] NishikawaSTT18a[281]
Cédric Pralet	SquillaciPR23[346] Pralet17[310] PraletLJ15[311]
Dhananjay R. Thiruvady	abs-2402-00459[279] abs-2211-14492[348] ThiruvadyBME09[361]
Jens Schulz	HeinzSB13[168] HeinzSB11[167] BertholdHLMS10[52]
Kana Shimada	NishikawaSTT19[282] NishikawaSTT18[280] NishikawaSTT18a[281]
Gilles Simonin	GodetLHS20[143] SimoninAHL15[342] SimoninAHL12[341]
Josep Suy	BofillCSV17[57] BofillGSV15[59] BofillEGPSV14[58]
Ittetsu Taniguchi	NishikawaSTT19[282] NishikawaSTT18[280] NishikawaSTT18a[281]
Pierre Tassel	TasselGS23[355] abs-2306-05747[356] KoyacsTKSG21[215]
Hiroyuki Tomiyama	NishikawaSTT19[282] NishikawaSTT18[280] NishikawaSTT18a[281]
Arnaldo Vieira Moura	LopesCSM10[246] MouraSCL08[271] MouraSCL08a[270] LopesCSM10[246] MouraSCL08[271] MouraSCL08a[270] LopesCSM10[246] MouraSCL08a[270] LopesCSM10[246] MouraSCL08a[270] LopesCSM10[246] MouraSCL08a[270] LopesCSM10[246] Lopes
Mateu Villaret	BofillCSV17[57] BofillGSV15[59] BofillEGPSV14[58]
Daniel Walkiewicz	LacknerMMW23[224] WinterMMW22[396] LacknerMMWW21[223]
Toby Walsh	GelainPRVW17[138] BessiereHMWW22[350] Educaterium WW21[255] GelainPRVW17[138] BessiereHMWW14[153] HebrardTW05[162]
Christophe Wolinski	WolinskiKG04[399] WolinskiKG04a[400] KuchcinskiW03[102]
Pascal Yim	Wollisking 4-[599] Wollisking 4-[400] Ritchelliski Wolf 16 [400] Korbaa YG00[207] Lopez AKYG00[247] Korbaa YG99[206]
Alessandro Zanarini	AstrandJZ20[22] AstrandJZ18[21] BonfiettiZLM16[64]
Luis Zeballos	ZeballosQH10[409] ZeballosH05[408] QuirogaZH05[317]
Miguel A. Salido	BartakS11[34] AbrilSB05[3]
Laurence A. Wolsey	HoundjiSWD14[183] SadykovW06[324]
Bruno A. Prata	PrataAN23[312] AbreuNP23[90]
Eddie Armstrong	ArmstrongGOS22[14] ArmstrongGOS21[13]
Mava B. Gokhale	ArmstrongGOS22[14] ArmstrongGOS21[13] WolinskiKG04[399] WolinskiKG04a[400]
maya D. Gukilale	wombantgo-t _{[0} 55] wombantgo-tal[400]

Table 7: Co-Authors of Articles/Papers

Author	Entries
Amelia Badica	BadicaBI20[23] BadicaBIL19[24]
Costin Badica	BadicaBI20[23] BadicaBIL19[24]
Pierre Baptiste	BoucherBVBL97[66] BaptisteLV92[30]
Nicolas Barnier	WangB23[391] WangB20[390]
Ondrej Benedikt	BenediktMH20[48] BenediktSMVH18[49]
Jean-Charles Billaut	BillautHL12[54] LorigeonBB02[248]
Dario Canut-de-Bon	YuraszeckMCCR23[406] YuraszeckMC23[405]
Quentin Cappart	PopovicCGNC22[307] CappartS17[73]
Ondrej Cepek	VilimBC05[384] VilimBC04[383]
Amedeo Cesta	OddiPCC03[288] CestaOS98[77]
Erich Christian Teppan	Teppan22[358] ColT19[83]
Elvin Coban	CireCH13[80] CobanH10[82]
Yves Colombani	HeipckeCCS00[171] Colombani96[84]
Joseph D. Scott	KameugneFSN14[195] KameugneFSN11[194]
Mauro Dell'Amico	MontemanniD23[268] MontemanniD23a[267]
Hani El Sakkout	KamarainenS02[190] SakkoutW00[325]
Abdallah Elkhyari	ElkhyariGJ02[107] ElkhyariGJ02a[108]
Caroline Even	EvenSH15[111] EvenSH15a[112]
Minhaz F. Zibran	ZibranR11 [418] ZibranR11a [419]
Dominique Feillet	Acuna-AgostMFG09[4] ArtiguesBF04[16]
Mark G. Wallace	SchuttCSW12[328] SchuttFSW11[332]
Maurizio Gabbrielli	LiuCGM17[239] FalaschiGMP97[114]
Michel Gamache	AalianPG23[1] CampeauG22[72]
Marc Garcia	BofillGSV15[59] BofillEGPSV14[58]
Michele Garraffa	ArmstrongGOS22[14] ArmstrongGOS21[13]
Antonio Garrido	GarridoAO09[126] GarridoOS08[127]
Vincent Gingras	KameugneFGOQ18[192] GingrasQ16[141]
Arthur Godet	Godet21a[142] GodetLHS20[143]
Arnaud Gotlieb	MossigeGSMC17[269] AlesioNBG14[99]
Lucas Groleaz	GroleazNS20[154] GroleazNS20a[153]
Christelle Guéret	ElkhvariGJ02[107] ElkhvariGJ02a[108]
Vilém Heinz	abs-2305-19888[170] HeinzNVH22[169]
Seyed Hossein Hashemi Doulabi	DoulabiRP16[104] DoulabiRP14[103]
Laurent Houssin	JuvinHHL23[188] JuvinHL23[189]
Georgiana Ifrim	GrimesIOS14[152] IfrimOS12[185]
Mirjana Ivanovic	BadicaBI20[23] BadicaBIL19[24]
Willem Jan van Hoeve	HoeveGSL07[373] GomesHS06[148]
Carla Juvin	JuvinHHL23[188] JuvinHL23[189]
Chanchal K. Roy	ZibranR11[418] ZibranR11a[419]
Lucas Kletzander	GeibingerKKMMW21[133] KletzanderM17[204]
Stefan Kreter	KreterSS17[217] KreterSS15[216]
Jan Kristof Behrens	BehrensLM19[40] abs-1901-07914[41]
Marie-Louise Lackner	LacknerMMWW23[224] LacknerMMWW21[223]
Arnaud Lallouet	PerezGSL23[299] abs-2312-13682[300]
Ralph Lange	BehrensLM19[40] abs-1901-07914[41]
Bruno Legeard	BoucherBVBL97[66] BaptisteLV92[30]
Michel Lemaître	NortallieL01375 BensanaLV99[51]
BoonPing Lim	Vertamic 1975 Seissama vo [61] LimHTB16[234] LimBTBB15[235]
Kamol Limtanyakul	LimtanyakulS12[237] Limtanyakul07[236]
James Little	KrogtLPHJ07[372] Darby-DowmanLMZ97[86]
Shixin Liu	KiegelF 130 [672] Date by Down and EM25 [60] LiFJZLL22[231] ZhangJZL22[410]
Xavier Lorca	GodetLHS20[143] HermenierDL11[174]
Abid M. Malik	Maliko8[255] MalikmBo8[256]
Gilles Madi-Wamba	Madi-WambaLOBM17[252] Madi-WambaB16[251]
Masoumeh Mansouri	BehrensLM19[40] abs-1901-07914[41]
Philippe Michelon	Acuna-AgostMFG09[4] LiessM08[232]
1 mmppe miencion	Treating Tigotestra Group Incontroclassis

Table 7: Co-Authors of Articles/Papers

Author	Entries
Roberto Montemanni	MontemanniD23[268] MontemanniD23a[267]
Christoph Mrkvicka	LacknerMMWW23[224] LacknerMMWW21[223]
István Módos	BenediktMH20[48] BenediktSMVH18[49]
Kenneth N. Brown	MurphyMB15[274] WuBB05[401]
Samba Ndojh Ndiaye	GroleazNS20[154] GroleazNS20a[153]
Youcheu Ngo-Kateu	KameugneFSN14[195] KameugneFSN11[194]
Su Nguyen	abs-2402-00459[279] $abs-2211-14492[348]$
Antonín Novák	abs-2305-19888[170] HeinzNVH22[169]
Angelo Oddi	OddiPCC03[288] CestaOS98[77]
Eva Onaindia	Garrido AOO 9 [126] $Garrido OSO 8 [127]$
Carla P. Gomes	HoeveGSL07[373] GomesHS06[148]
Laure Pauline Fotso	KameugneFSN14[195] KameugneFSN11[194]
Guillaume Perez	PerezGSL23[299] abs-2312-13682[300]
Enrico Pontelli	TardivoDFMP23[354] Villaverde $P04[386]$
Oscar Quiroga	ZeballosQH10[409] QuirogaZH05[317]
Günther R. Raidl	FrohnerTR 19[122] RendlPHPR 12[318]
Levi Ribeiro de Abreu	AbreuNP23[90] AbreuN22[89]
Ruslan Sadykov	SadykovW06[324] Sadykov04[323]
Konstantin Schekotihin	TasselGS23[355] abs-2306-05747[356]
Christian Schulte	WessenCS20[394] FrimodigS19[121]
Marcelo Seido Nagano	AbreuNP23[90] AbreuN22[89]
Bart Selman	HoeveGSL07[373] $GomesHS06[148]$
Paul Shaw	LaborieRSV18[222] VilimLS15[385]
Mohamed Siala	Siala15[339] SialaAH15[340]
Wijnand Suijlen	PerezGSL23[299] abs-2312-13682[300]
Yuan Sun	abs-2402-00459[279] abs-2211-14492[348]
Andreas T. Ernst	abs-2211-14492[348] ThiruvadyBME09[361]
Reza Tavakkoli-Moghaddam	Mehdizadeh-Somarin23[260] MokhtarzadehTNF20[264]
Clémentin Tayou Djamégni	KameugneFND23[193] FetgoD22[116]
Alexander Tesch	Tesch18[360] Tesch16[359]
Sylvie Thiébaux	LimHTB16[234] LimBTBB15[235]
Seyda Topaloglu Yildiz	IsikYA23[186] YunusogluY22[404]
Behdin Vahedi Nouri	Mehdizadeh-Somarin23[260] MokhtarzadehTNF20[264]
Sascha Van Cauwelaert	CauwelaertDMS16[76] DejemeppeCS15[92]
Christophe Varnier	BoucherBVBL97[66] BaptisteLV92[30]
Gérard Verfaillie	VerfaillieL01[375] BensanaLV99[51]
Ruixin Wang	WangB23[391] WangB20[390]
Jean-Paul Watson	BeckFW11[38] WatsonB08[393]
Farouk Yalaoui	OujanaAYB22[292] ArbaouiY18[12]
Neil Yorke-Smith	EfthymiouY23 106 WallaceY20 389
Francisco Yuraszeck	YuraszeckMCCR23[406] YuraszeckMC23[405]
Ziyan Zhao	LiFJZLL22[231] ZhangJZL22[410]
Jianyang Zhou	Zhou97[415] Zhou96[414]
Willem-Jan van Hoeve	GilesH16[140] GoelSHFS15[144]
Menkes van den Briel	LimHTB16[234] LimBTBB15[235]
Peter van Beek	BegB13[39] MalikMB08[256]
Florian A. Herzog	KoehlerBFFHPSSS21[205]
J. A. Hoogeveen	AkkerDH07[370]
M. A. Hakim Newton	RiahiNS018[319]
Viktoria A. Hauder	abs-1902-09244[160]
Amr A. Kandil	TangLWSK18[353]
Antonio A. Márquez	ValleMGT03[369]
Younes Aalian	AalianPG23[1]
Hanaa Abohashima	AbohashimaEG21[2]
Montserrat Abril	AbrilSB05[3]
Rodrigo Acuna-Agost	Acuna-AgostMFG09[4]
07	18 () () () () () () () () () (

Table 7: Co-Authors of Articles/Papers

Author	Entries
W. Adelman	EscobetPQPRA19[110]
Michael Affenzeller	abs-1902-09244[160]
Abderrahmane Aggoun	AggounB92[5]
Penélope Aguiar-Melgarejo	MelgarejoLŠ15[6]
Sanjay Ahire	$\mathrm{KanetAG04[196]}$
Aftab Ahmed Shaikh	ShaikhK23[336]
Uwe Aickelin	$abs-2211-1\dot{4}492[348]$
Mohsen Akbarpour Shirazi	ZarandiKS16[407]
Samira Alizdeh	AlizdehS20[9]
Hassane Alla	LopezAKYG00[247]
Lionel Amodeo	OujanaAYB22[292]
Ola Angelsmark	${ m AngelsmarkJ00[10]}$
M. Anton Ertl	ErtlK91[109]
Zbigniew Antoni Banaszak	BocewiczBB09[56]
Valentin Antuori	AntuoriHHEN21[11]
Marlene Arangú	GarridoAO09[126]
Taha Arbaoui	ArbaouiY18[12]
Martin Aronsson	AronssonBK09[15]
M. Arslan Ornek	OzturkTHO13[293]
Konstantin Artiouchine	ArtiouchineB05[18]
Abdullah Ayub Khan	ShaikhK23[336]
Emrah B. Edis	EdisO11[105]
Amr B. Eltawil	AbohashimaEG21[2]
David B. H. Tay	$\mathrm{Tay}92[357]$
Özalp Babaoglu	GalleguillosKSB19[124]
Irena Bach	BocewiczBB09[56]
Astrid Bachelu	BoucherBVBL $\dot{9}$ 7 $\dot{[}$ 66 $\dot{]}$
Scott Backhaus	LimBTBB15[235]
Hari Balasubramanian	ShinBBHO18[338]
Viet Bang Nguyen	LauLN08[226]
Federico Barber	$AbrilSB0\dot{5}[3]$
Ada Barlatt	BarlattCG08[31]
Andrea Bartolini	BartoliniBBLM14[35]
Mohammadreza Barzegaran	BarzegaranZP20[36]
Virginie Basini	Polo- $ ilde{ ext{Mej}}$ ia $ ext{ALB20[306]}$
Andreas Beham	abs-1902-09244[160]
Said Belhadji	BelhadjiI98[46]
Sana Belmokhtar	Artigues BF04[16]
Fatima Benbouzid-Si Tayeb	TouatBT22[365]
Till Bender	$\mathrm{BenderWS}21[47]$
Belaid Benhamou	$ ext{TouatBT22[365]}$
Hachemi Bennaceur	$\operatorname{Khemmoud}_{\overline{J}}\operatorname{PB06}[201]$
E. Bensana	BensanaLV99[51]
Russell Bent	LimBTBB15[235]
Timo Berthold	$\operatorname{BertholdHLMS}10[52]$
Davide Bertozzi	$\operatorname{BeniniBGM06[50]}$
Christian Bessiere	BessiereHMQW14[53]
Arthur Bit-Monnot	Bit-Monnot23[55]
Christian Blum	ThiruvadyBME09[361]
Grzegorz Bocewicz	BocewiczBB09[56]
Markus Bohlin	A ronsson BK 09 [15]
Nicolas Bonifas	BaptisteB18[26]
Andrea Borghesi	BartoliniBBLM14[35]
Eric Boucher	BoucherBVBL97[66]
Raphaël Boudreault	BoudreaultSLQ22[67]
Jean-Louis Bouquard	LorigeonBB02[248]

Table 7: Co-Authors of Articles/Papers

Author	Entries
Eric Bourreau	BourreauGGLT22[68]
Silvia Breitinger	BreitingerL95[69]
Kristen Brent Venable	GelainPRVW17[138]
Thomas Bridi	BartoliniBBLM14[35]
D. Brodart	OujanaAYB22[292]
Yuriy Brun	ShinBBHO18[338]
Josef Bürgler	KoehlerBFFHPSSS21[205]
Cristina C. B. Cavalcante	HeipckeCCS00[171]
Lionel C. Briand	AlesioNBG14[99]
Eugene C. Freuder	$CarchraeBF0\dot{5}[7\dot{4}]$
Kevin C. Furman	$ ext{GoelSHFS15}[144]^{'}$
Joseph C. Pemberton	PembertonG98[298]
Hendrik C. R. Lock	BreitingerL95[69]
Louis-Pierre Campeau	CampeauG22[72]
Tom Carchrae	CarchraeBF05[74]
Cid Carvalho de Souza	$Lopes CSM10[\dot{2}46]$
Yves Caseau	Caseau97[75]
Yao-Ting Chang	HoYCLLCLC18[176]
Nicolas Chapados	ChapadosJR11[78]
Han-Mo Chiu	HoYCLLCLC18[176]
Yeonjun Choi	KimCMLLP23[202]
Geoffrey Chu	SchuttCSW12[328]
Yingyi Chu	ChuX05[79]
Sue-Min Chu	HoYCLLCLC18[176]
Hoong Chuin Lau	LauLN08[226]
Carleton Coffrin	SchausHMCMD11[326]
Jordi Coll Caballero	Caballero23[71]
Jordi Coll	BofilCSV17[57]
Trijntje Cornelissens	SimonisC95[345]
Gabriella Cortellessa	OddiPCC03[288]
Nicolás Cuneo	YuraszeckMCCR23[406]
Alain Côté	PopovicCGNC22[307]
Kenneth D. Young	YoungFS17[403]
Laurent D. Michel	FontaineMH16[117]
Steven D. Prestwich	RossiTHP07[321]
Giacomo Da Col	ColT19[83]
Emilie Danna	DannaP03[85]
Ken Darby-Dowman	Darby-DowmanLMZ97[86]
Vivian De Smedt	GaySS14[131]
Alexis De Clercq	ClercqPBJ11[81]
Rina Dechter	FrostD98[123]
Carmelo Del Valle	ValleMGT03[369]
Alain Demeure	JourdanFRD94[187]
Emir Demirovic	DemirovicS18[95]
Roberto Di Cosmo	LiuCGM17[239]
Guido Diepen	AkkerDH07[370]
Bistra Dilkina	DilkinaDH05[100]
Mehmet Dincbas	DinchasSH90[101]
Grégoire Dooms	DoomsH08[102]
Agostino Dovier	TardivoDFMP23[354]
Yuquan Du	QinDCS20[315]
Lei Duan	DilkinaDH05[100]
Didier Dubois	FortinZDF05[118]
Pierre Dupont	MonetteDD07[265]
David Duvivier	WangMD15[392]
Kyle E. C. Booth	Walls 10 00 00 00 00 00 00 00
, 0. 200011	

Table 7: Co-Authors of Articles/Papers

Author	Entries
Marco E. Lübbecke	BertholdHLMS10[52]
Ignacio E. Grossmann	MaraveliasG04[257]
Andrew E. Santosa	ZhuS02[417]
Nikolaos Efthymiou	EfthymiouY23[106]
Gokhan Egilmez	GedikKEK18[132]
Péter Egri	KovacsEKV05[211]
Nizar El Hachemi	HachemiGR11[158]
Ghada El Khayat	KhayatLR06[200]
Sebastian Engell	KlankeBYE21[203]
Eyüp Ensar İsik	IsikYA23[186]
Tamer Eren	$\operatorname{GurPAE}23[157]$
Teresa Escobet	EscobetPQPRA19[110]
Joan Espasa	BofillEGPSV14[58]
Siham Essodaigui	AntuoriHHEN21[11]
Stephen F. Smith	CestaOS98[77]
Michael F. Gorman	KanetAG04[196]
Mohd Fadlee A. Rasid	AkramNHRSA23[7]
François Fages	JourdanFRD94[187]
Hamed Fahimi	FahimiOQ18[113]
Moreno Falaschi	FalaschiGMP97[114]
Huali Fan	FanXG21[115]
Hélène Fargier	FortinZDF05[118]
Azadeh Farsi	Mokhtarzadeh TNF 20 [264]
Daniel Fontaine	FontaineMH16[117]
Urs Fontana	KoehlerBFFHPSSS21[205]
Andrea Formisano	TardivoDFMP23[354]
Jérôme Fortin	FortinZDF05[118]
Jeremy Frank	FrankK05[119]
Gerhard Friedrich	FriedrichFMRSST14[120]
Sara Frimodig	FrimodigS19[121]
Nikolaus Frohner	FrohnerTR19[122]
Daniel Frost	FrostD98[123]
Melanie Frühstück	FriedrichFMRSST14[120]
Jun Fu	LiFJZLL22[231]
Etienne Fux	KoehlerBFFHPSSS21[205]
Ernesto G. Birgin	LunardiBLRV20[249]
Mohamed Gaha	PopovicCGNC22[307]
Flavius Galiber III	PembertonG98[298]
Cristian Galleguillos	GalleguillosKSB19[124]
Graeme Gange	He0GLW18[161]
Thierry Garaix	BourreauGGLT22[68]
Antoine Gargani	GarganiR07[125]
Jonathan Gaudreault	Mercier-AubinGQ20[263]
Ridvan Gedik	GedikKEK18[132]
Marc Geitz	GeitzGSSW22[137]
Mirco Gelain	GelainPRVW17[138]
Michel Gendreau	HachemiGR11[158]
Marcus Gerhard Müller	MullerMKP22[272]
Patrick Gerhards	HubnerGSV21[184]
Ulrich Geske	Geske05[139]
Katherine Giles	GilesH16[140]
Gaël Glorian	PerezGSL23[299]
Gael Glorian	abs-2312-13682[300]
Vikas Goel	GoelSHFS15[144]
Mark Goh	Goestin 310 [144] Fan XG21 [115]
Adrian Goldwaser	Fail Act 11
Tarian Goldwasei	001411001011[110]

Table 7: Co-Authors of Articles/Papers

Author	Entries
Hans-Joachim Goltz	Goltz95[147]
Matthieu Gondran	BourreauGGLT22[68]
Cristian Grozea	GeitzGSSW22[137]
Flavius Gruian	GruianK98[155]
Hanyu Gu	$GuSS13[15\hat{6}]$
Alessio Guerri	BeniniBGM06[50]
Serigne Gueye	$Acuna-Agost \dot{M}FG09[4]$
Ying Guo	ZhouGL15[416]
Burak Gökgür	GokgurHO 18 [145]
Seyda Gür	GurPAE23[157]
Fehmi H'Mida	TrojetHL11[367]
Rolf H. Möhring	BertholdHLMS10[52]
John H. Drake	PourDERB18[308]
M. H. Fazel Zarandi	$\operatorname{ZarandiKS16[407]}$
Claire Hanen	HanenKP21[159]
Jiang Hang Chen	QinDCS20[315]
Sue Hanhilammi	KrogtLPHJ07[372]
Mohamed Haouari	LahimerLH11[225]
Fazirulhisyam Hashim	AkramNHRSA23[7]
Shan He	He0GLW18[161]
Susanne Heipcke	HeipckeCCS00[171]
Fabien Hermenier	HermenierDL11[174]
Gerhard Hiermann	RendIPHPR12[318]
Alessandro Hill	HillTV21[175]
Te-Wei Ho	HoYCLLCLC18[176]
Petra Hofstedt	LiuLH19[238]
John Hou	DavenportKRSH07[88]
Marie-José Huguet	AntuoriHHEN21[11]
Felix Hübner	HubnerGSV21[184]
Amar Isli	BelhadjiI98[46]
Mustafa Ismael Salman	AkramNHRSA23[7]
Fernando J. M. Marcellino	SerraNM12[335]
Leon J. Osterweil	ShinBBHO18[338]
H. J. Kim	SureshMOK06[350]
John J. Kanet	Kanet A G 04 [196]
Colin J. Layfield	Layfield02[227]
Andrew J. Mason	Mason01 [259]
Jean Jaubert	PraletLJ15[311]
Yingjun Ji	Zhang/JZL22[410]
Zixi Jia	LiFJZLL22[231]
Yunfei Jiang	LiuJ06[240]
Yue Jin	KrogtLPHJ07[372]
Marc Joliveau	ChapadosJR11[78]
Peter Jonsson	AngelsmarkJ00[10]
Jean Jourdan	JourdanFRD94[187]
Jae-Yoon Jung	90Hdam 12D34[161] ParkUJR19[297]
T. K. Satish Kumar	Kumar03[219]
Edmund K. Burke	PourDERB18[308]
T. K. Feng	BeckFW11[38]
Jayant Kalagnanam	DavenportKRSH07[88]
Darshan Kalathia	GedikKEK18[132]
Olli Kamarainen	KamarainenS02[190]
Nor Kamariah Noordin	AkramNHRSA23[7]
Elena Kelareva	KelarevaTK13[197]
Jan Kelbel	KelbelH11[198]
H. Khorshidian	ZarandiKS16[407]

Table 7: Co-Authors of Articles/Papers

Author	Entries
Philip Kilby	KelarevaTK13[197]
Dongyun Kim	$\operatorname{KimCMLLP23[202]}$
Emre Kirac	GedikKEK18[132]
Zeynep Kiziltan	GalleguillosKSB19[124]
Christian Klanke	KlankeBYE21[203]
Jana Koehler	KoehlerBFFHPSSS21[205]
Wolfgang Kohlenbrein	KovacsTKSG21[215]
Rainer Kolisch	PohlAK22[305]
Sebastian Kosch	KoschB14[208]
Benjamin Kovács	KovacsTKSG21[215]
Matthias Krainz	GeibingerKKMMW21[133]
Andreas Krall	ErtlK91[109]
Dominik Kress	$ m Muller \dot{M} KP \dot{2} 2[272]$
Per Kreuger	AronssonBK09[15]
Wen-Yang Ku	HeinzKB13[165]
Elif Kürklü	FrankK05[119]
András Kéri	KeriK07[199]
Michael L. Pinedo	KimCMLLP23[202]
Hassan L. Hijazi	LimHTB16[234]
Philip L. Henneman	ShinBBHO18[338]
Philippe Lacomme	BourreauGGLT22[68]
Daniel Lafond	BoudreaultSLQ22[67]
Asma Lahimer	LahimerLH11[225]
Feipei Lai	HoYCLLCLG[176]
Jui-Fen Lai	HoYCLLCLC18[176]
André Langevin	KhayatLR06[200]
Christophe Lecoutre	GayHLS15[128]
Myungho Lee	KimCMLLP23[202]
Kangbok Lee	KimCMLLP23 202
Solange Lemai-Chenevier	PraletLJ15[311]
Xingvang Li	LiFJZLL22[231]
Siyi Li	LiFJZLL22[231]
Xiaodong Li	abs-2211-14492[348]
Guipeng Li	ZhouGL15[416]
Hong Li	SunLYL10[349]
Nan Li	SunLYL10[349]
Yunbo Li	Madi-WambaLOBM17[252]
Wan-Chung Liao	HoYCLLCLC18[176]
Ariel Liebman	He0GLW18[161]
Olivier Liess	LiessM08[232]
Andrew Lim	LimRX04[233]
Nir Lipovetzky	BurtLPS15[70]
Tong Liu	LiuCGM17[239]
Lingxuan Liu	QinWSLS21[314]
Ke Liu	LiuLH19[238]
Rengkui Liu	TangLWSK18[353]
Yuechang Liu	LiuJ06[240]
Doina Logofatu	BadicaBIL19[24]
Thomas Lorigeon	LorigeonBB02[248]
Chang Lv	MengZRZL20[262]
Zhimin Lv	ZhangLS12[413]
Sven Löffler	LiuLH19[238]
J. M. van den Akker	Akker DH07[370]
Abdulrahman M. Abdulghani	AkramNHRSA23[7]
O. M. Alade	abs-1902-01193[8]
Shahrzad M. Pour	PourDERB18[308]
	the state of the s

Table 7: Co-Authors of Articles/Papers

Author	Entries
Franco M. Novara	NovaraNH16[283]
Rafael M. Gasca	ValleMGT03[369]
Jun Ma	MakMS10[253]
Amy Mainville Cohn	BarlattCG08[31]
Kai-Ling Mak	MakMS10[253]
V. Mani	SureshMOK06[350]
Oscar Manzano	MurphyMB15[274]
Kourosh Marjani Rasmussen	PourDERB18[308]
Kim Marriott	FalaschiGMP97[114]
Fae Martin	MartinPY01[258]
Jacopo Mauro	LiuCGM17[239]
Jim McInnes	MalikMB08[256]
Zahra Mehdizadeh-Somarin	Mehdizadeh-Somarin23[260]
Haci Mehmet Alakas	GurPAE23[157]
Sebastian Meiswinkel	Winter MMW22[396]
Gonzalo Mejía	YuraszeckMC23[405]
Hein Meling	MossigeGSMC17[269]
Julien Menana	Menanal1[261]
Jean-Marc Menaud	Madi-WambaLOBM17[252]
Leilei Meng	MengZRZL20[262]
Alexandre Mercier-Aubin	Mercier-AubinGQ20[263]
Vera Mersheeva	FriedrichFMRSST14[120]
Nadine Meskens	WangMD15[392]
Bernd Meyer	ThiruvadyBME09[361]
Gautam Mitra	Darby-DowmanLMZ97[86]
Mahdi Mokhtarzadeh	MokhtarzadehTNF20[264]
Elizabeth Montero	YuraszeckMCCR23[406]
Kyungduk Moon	KimCMLLP23[202]
Morten Mossige	MossigeGSMC17[269]
Alix Munier Kordon	HanenKP21[159]
Stanislav Murín	MurinR19[273]
Nicola Muscettola	Muscettola02[275]
David Müller	$MullerMKP2\dot{2}[27\dot{2}]$
András Márkus	VanczaM01[374]
Marc-André Ménard	$\operatorname{BessiereHMQW14[53]}$
Christina N. Burt	BurtLPS15[70]
T. N. Wong	ZhangYW21[4]11
Sophie N. Parragh	abs-1902-09244[160]
S. N. Omkar	SureshMOK06[350]
Goldie Nejat	BoothNB16[65]
Shiva Nejati	AlesioNBG14[99]
Franklin Nguewouo	PopovicCGNC22[307]
Alain Nguyen	AntuoriHHEN21[11]
Gilberto Nishioka	SerraNM12[335]
Thierry Noulamo	KameugneFND23[193]
Wim Nuijten	BaptisteLPN06[27]
Jari Nurmi	QuSN06[316]
A. O. Amusat	abs-1902-01193[8]
Ceyda Oguz	EdisO11[105]
Bilal Omar Akram	AkramNHRSA23[7]
Mirza Omer Beg	BegB13(39)
Anne-Cécile Orgerie	Madi-WambaLOBM17[252]
Mohand Ou Idir Khemmoudj	KhemmoudjPB06[201]
Pierre Ouellet	OuelletQ13[289]
Soukaina Oujana	OujanaÄYB22[292]
Irem Ozkarahan	TopalogluO11[364]
	41 (10 mm - 11 1 1

Table 7: Co-Authors of Articles/Papers

Author	Entries
Débora P. Ronconi	LunardiBLRV20[249]
Edward P. K. Tsang	Tsang03[368]
Miquel Palahí	BofilEGPSV14[58]
Catuscia Palamidessi	FalaschiGMP97[114]
Pere Palà-Schönwälder	EscobetPQPRA 19[110]
Vaibhav Pandey	PandeyS21a[294]
Hoonseok Park	ParkUJR19[297]
Theo Pedersen	HanenKP21[159]
Laurent Perron	DannaP03[85]
Erwin Pesch	MullerMKP22[272]
Mehmet Pinarbasi	GurPAE23[157]
Arthur Pinkney	MartinPY01[258]
David Pisinger	SacramentoSP20[322]
Maximilian Pohl	PohlAK22[305]
Nicola Policella	OddiPCC03[288]
Oliver Polo-Mejía	Polo-MejiaALB20[306]
Paul Pop	BarzegaranZP20[36]
Louis Popovic	PopovicCGNC22[307]
Marc Porcheron	KhemmoudiPB06[201]
Marc Pouly	KoehlerBFFHPSS21[205]
Guillaume Povéda	PovedaAA23[309]
Matthias Prandtstetter	RendlPHPR12[318]
Jakob Puchinger	RendIPHPRI2[318]
Jean-Francois Puget	Puget95[313]
Vicenç Puig	EscobetPQPRA19[110]
Kenneth Pulliam	KrogtLPHJ07[372]
Kenny Qili Zhu	ZhuS02[417]
Ming Qin	QinWSL521[314]
Tianbao Qin	QinDCS20[315]
Yang Qu	QuSN06[316]
Yuchen Quan	Quisivo[16] ShiYXQ22[337]
Joseba Quevedo	EscobetPQPRA19[110]
Dominik R. Bleidorn	KlankeBYE21[203]
Aliza R. Heching	HechingH16[163]
Adrian R. Pearce	BurtLPS15[70]
Levi R. Abreu	PrataAN23[312]
Sebastian Raggl	abs-1902-09244[160]
Vinasétan Ratheil Houndji	aus-1302-032-4[100] HoundjiSWD14[183]
Chandra Reddy	Hounding WD 14[189] Davenport KRSH07[88]
Philippe Refalo	Bavelijot tarteitio [66] Gargani (807[125]
Yaping Ren	MengZRZL20[262]
Andrea Rendl	RendlPHPR12[318]
Hamid Reza Feyzmahdavian	Astrand0F21[20]
Vahid Riahi	RiahiNS018[319]
Diane Riopel	KhayatLR06[200]
Gregory Rix	PesantRR15[301]
Robert Rodosek	RodosekW98[320]
Brian Rodrigues	LimRX04[233]
Jerome Rogerie	LaborieRSV18[222]
	Mehdizadeh-Somarin23[260]
Mohammad Rohaninejad	
Maximiliano Rojel	YuraszeckMCCR23[406]
Juli Romera	EscobetPQPRA19[110]
Francesca Rossi	GelainPRVW17[138]
Roberto Rossi	RossiTHP07[321]
François Roubellat	ArtiguesR00[17]
Stéphanie Roussel	SquillaciPR23[346]

Table 7: Co-Authors of Articles/Papers

Author	Entries
Didier Rozzonelli	JourdanFRD94[187]
Hana Rudová	MurinR19[273]
Martin Ruskowski	ParkUJR19[297]
Anna Ryabokon	FriedrichFMRSST14[120]
William S. Havens	DilkinaDH05[100]
Mark S. Fox	BeckDF97[37]
Marcelo S. Nagano	PrataAN23[312]
Mohamed S. Gheith	AbohashimaEG21[2]
David Sacramento	SacramentoSP20[322]
Shahram Saeidi	AlizdehS20[9]
Poonam Saini	PandeyS21a[294]
Sophia Saller	KoehlerBFFHPSS21[205]
Anastasia Salyaeva	KoehlerBFFHPSSS21 205
Maria Sander	FriedrichFMRSST14[120]
Eric Sanlaville	PoderBS04[304]
Óscar Sapena	GarridoOS08[127]
	IsikYA23[186]
Özge Satir Akpunar	
Abdul Sattar	RiahiNS018[319]
Peter Scheiblechner	KoehlerBFFHPSSS21[205]
Klaus Schild	SchildW00[327]
Thomas Schlechte	HeinzSSW12[166]
Thorsten Schmidt	BenderWS21[47]
Gunnar Schrader	WolfS05[398]
Philipp Schrott-Kostwein	KovacsTKSĞ21[215]
Uwe Schwiegelshohn	LimtanyakulS12[237]
Lena Secher Ejlertsen	PourDERB18[308]
Thiago Serra	SerraNM12[335]
Mei Sha	QinDCS20[315]
Yufen Shao	GoelSHFS15[144]
Ganquan Shi	ShiYXQ22[337]
Zhongshun Shi	QinWSLS21[314]
Leyuan Shi	QinWSLS21[314]
Stuart Siegel	DavenportKRSH07[88]
Maria Silvia Pini	GelainPRVW17[138]
Vanessa Simard	BoudreaultSLQ22[67]
Pawel Sitek	WikarekS19[395]
M. Slusky	m GoelSHFS15[144]
Juha-Pekka Soininen	QuSN06[316]
Xiaoqing Song	ZhangLS12[413]
Helge Spieker	MossigeGSMC17[269]
Samuel Squillaci	SquillaciPR23[346]
Andreas Starzacher	FriedrichFMRSST14[120]
Wolfgang Steigerwald	GeitzGSSW22[137]
Rüdiger Stephan	HeinzSSW12[166]
Robin Stöhr	GeitzGSSW22[137]
Christian Stürck	HubnerGSV21[184]
Kaile Su	RiahiNS018[319]
Wei Su	MakMS10[253]
Kemal Subulan	SubulanC22[347]
Premysl Sucha	BenediktSMVH18[49]
Quanxin Sun	TangLWSK18[353]
Zheng Sun	SunLYL10[349]
Suresh Sundaram	SureshMOK06[350]
Ria Szeredi	SzerediS16[351]
Alina Sîrbu	GalleguillosKSB19[124] MaraveliasG04[257]
Christos T. Maravelias	

Table 7: Co-Authors of Articles/Papers

Author	Entries
Willian T. Lunardi	LunardiBLRV20[249]
Siyu Tang	VlkHT21[387]
Yuanjie Tang	TangLWSK18[353]
Fabio Tardivo	TardivoDFMP23[354]
Armagan Tarim	RossiTHP07[321]
Nikolay Tchernev	BourreauGGLT22[68]
Erich Teppan	FriedrichFMRSST14[120]
Willian Tessaro Lunardi	Lunardi20[250]
Stephan Teuschl	$\operatorname{FrohnerTR} . 19[122]$
Jordan Ticktin	HillTV21[175]
Kevin Tierney	Kelareva TK13[197]
Christian Timpe	Timpe02[362]
Mary Tom	$Tom 19[3\hat{6}\hat{3}]$
Seyda Topaloglu	TopalogluÓ11[364]
Miguel Toro	ValleMGT03[369]
Meriem Touat	$\mathrm{TouatBT22}[\widehat{3}65]$
Touraïvane	Touraivane95[366]
Mariem Trojet	TrojetHL11[367]
Semra Tunali	OztůrkTHO13[293]
Paul Tyler	m HebrardTW05[162]
Jumyung Um	ParkUJR19[297]
Karen Villaverde	VillaverdeP04[386]
Rebekka Volk	$\operatorname{HubnerGSV21[184]}$
Holger Voos	$\operatorname{LunardiBLRV20}[249]$
Thomas W. M. Vossen	HillTV21[175]
Kai Waelti	KoehlerBFFHPSS21[205]
Runsen Wang	QinWSLS21[314]
Futian Wang	TangLWSK18[353]
Shouyang Wang	ZhangW18[412]
Tao Wang	WangMD15[392]
Christine Wei Wu	$\text{WuBB05}[40\dot{1}]$
Kong Wei Lye	$\operatorname{LauLN08}[226]$
Johan Wessén	WessenCS20[394]
Jaroslaw Wikarek	WikarekS19[395]
Campbell Wilson	$ m He0GLW18[\dot{1}61]^{'}$
Michael Winkler	m HeinzSSW12[166]
David Wittwer	BenderWS21[47]
Jörg Würtz	$\operatorname{SchildW00[327]}^{\circ}$
Quanshi Xia	$\mathrm{ChuX}05[79]$
Hegen Xiong	$\operatorname{FanXG21}[115]$
Zhou Xu	LimRX04[233]
Yang Xu	$\mathrm{ShiYXQ}22[337]$
Tanya Y. Tang	${\rm TangB20[352]}$
Hong Yan	$\operatorname{HookerY02}[182]$
Moli Yang	$ ext{YangSS19[402]}^{\circ}$
Zhouwang Yang	$\mathrm{ShiYXQ22}[337]$
Jia-Sheng Yao	HoYCLLCLC18[176]
Min Yao	SunLYL10[349]
Seung Yeob Shin	ShinBBHO18[338]
Vassilios Yfantis	$\operatorname{KlankeBYE21}[203]$
Chunxia Yu	ZhangYW21[411]
Xinghuo Yu	MartinPY01[258]
Oleg Yu. Gusikhin	BarlattCG08[31]
Pinar Yunusoglu	YunusogluY22[404]
Marco Zaffalon	Darby-DowmanLMZ97[86]
Stéphane Zampelli	DerrienPZ14[98]

Table 7: Co-Authors of Articles/Papers

Author	Entries	
Bahram Zarrin	BarzegaranZP20[36]	
Mengjie Zhang	$abs-2402-00459[\overline{279}]$	
Haotian Zhang	m Zhang JZL 22[410]	
Luping Zhang	ZhangYW21[411]	
Chaoyong Zhang	m Meng ZRZL20[262]	
Biao Zhang	m MengZRZL20[262]	
Sicheng Zhang	ZhangW18[412]	
Xujun Zhang	ZhangLS12[413]	
Jinlian Zhou	ZhouGL15[416]	
Pawel Zielinski	FortinZDF05[118]	
Mathijs de Weerdt	$\operatorname{BogaerdtW19[371]}$	
Roman van der Krogt	KrogtLPHJ07[372]	
Pim van den Bogaerdt	$\operatorname{BogaerdtW19[371]}$	
Stefano Di Alesio	AlesioNBG14[99]	
Selin Özpeynirci	GokgurHO18[145]	
Cemalettin Öztürk	OzturkTHO13[293]	
Nahum Álvarez	PovedaAA23[309]	
Seán Óg Murphy	MurphyMB15[274]	
Gizem Çakir	SubulanC22[347]	

5 Problem Classification

Table 8: Problem Classification Types

Code	Name		
JSSP	Job-Shop Scheduling Problem		
JSPT	Job-Shop Scheduling Problem with Transportation		
PP-MS-MMRCPSP/max-cal	partially preemptive- multi-skill/mode resource-		
·	constrained project scheduling problem with gener-		
	alized precedence relations and resource calendars		
RCPSP	Resource Constrained Project Scheduling Problem		
TMS	Transmission Network Maintenance Planning		
PMSP	Parallel Machine Scheduling Problem		
HFF	Hybrid Flexible Flow-shop		
$HFFm tt C_{\max}$	Hybrid Flexible Flowshop with Transportation		
	Times		
OSP	Oven Scheduling Problem		
PTC	Scheduling Problem with Time Constraints		
GCSP	Group Cumulative Scheduling Problem		
2BPHFSP	Two-Stage Bin Packing and Hybrid Flow Shop		
	Scheduling Problem		
CTW	Cable Tree Wiring Problem		
CHSP Cyclic Hoist Scheduling Problem			
CECSP	Continuous Energy-Constrained Scheduling Problem		
CuSP	Cumulative Scheduling Problem		
SBSFMMAL	Simultaneous Balancing and Scheduling of Flexible		
	Mixed Model Assembly Lines		
SMSDP	steel mill slab design problem		
KRFP	kernel resource feasibility problem		
TCSP	Temporal Constraint Satisfaction Problem		
PJSSP	Pre-emptive Job-Shop scheduling Problem		
MGAP	Modified Generalized Assignment Problem		
EOSP	Earth Observation Scheduling Problem		
SCC Steel-making and continuous casting			
OSSP Open Shop Scheduling Problem			
FJS	Fixed Job Scheduling		
RCPSPDC	Resource-constrained Project Scheduling Problem		
T. (222.2)	with Discounted Cashflow		
LSFRP	Liner Shipping Fleet Repositioning Problem		
BPCTOP	Bulk Port Cargo Throughput Optimisation Problem		

6 Concept Matching

In order to find out properties of the articles, we try to find concepts in the pdf versions of the articles. We use the *pdfgrep* command to search for the number of occurrences of certain regular expressions in the files. This often clearly identifies the constraints used in the model, and the solvers that are discussed.

	Table 9: Papers by Domain and Keyword				
Domain	Keyword	High	Medium	Low	
Concepts Concepts Concepts	Allen's algebra BOM activity	SubulanC22[347] AalianPG23[1], PovedaAA23[309], TardivoDFMP23[354], CampeauG22[72], SubulanC22[347], BenderWS21[47], HubnerGSV21[184], KlankeBYE21[203], AstrandJZ20[22], GeibingerMM19[135], MurinR19[273], abs-1902-09244[160], abs-1911-04766[134], AstrandJZ18[21], LaborieRSV18[222], BofillCSV17[57], CappartS17[73], KreterSS17[217], LiuCGM17[239], Pralet17[310], YoungFS17[403], BonfiettiZLM16[64], CauwelaertDMS16[76], GilesH16[140], LimHTB16[234], NovaraNH16[283], SzerediS16[351], DejemeppeCS15[92], KreterSS15[216], LombardiBM15[241], DejemeppeD14[93], DerrienP14[97], GrimesIOS14[152], DerrienP214[98], BonfiettiLM14[63], GaySS14[131], NovasH14[287], GuSS13[156], OzturkTHO13[293], cpaior-SchuttFS13[329], BonfiettiLBM12[62], LombardiM12[245], NovasH12[286], SchuttCSW12[328], SerraNM12[335], SimoninAHL12[341], HachemiGR11[158], ClercqPBJ11[81], BonfiettiLBM11[61], KovacsB11[210], LombardiMBB11[242], SchuttFSW11[332], Vilim11[382], ZibranR11a[419], LombardiM09[243], MonetteDH09[266], Vilim09[380], abs-0907-0939[302], cpaior-Vilim09[381], DoomsH08[102], KovacsB08[209], LiessM08[232], MouraSCL08[271], DavenportKRSH07[88], KeriK07[199], BeniniBGM06[50], FortinZDF05[118], QuirogaZH05[317], Vilim05[379], VilimBC05[384], ZeballosH05[408], HentenryckM04[172], Vilim04[378], VilimBC04[383], OddiPCC03[288], ElkhyariGJ02[107], ElkhyariGJ02a[108], Muscettlola02[275], BaptisteP00[29], ArtiguesR00[17], SakkoutW00[325], GruianK98[155], PapaB98[296], BaptisteP97[28]	Bit-Monnot23[55], YuraszeckMCCR23[406], BoudreaultSLQ22[67], PopovicGNC22[307], LunardiBLRV20[249], EscobetPQPRA19[110], Novas19[284], YangSS19[402], ShinBBHO18[338], BoothNB16[65], SchuttS16[333], GoelSHFS15[144], VilimLS15[385], DoulabiRP14[103], ChapadosJR11[78], ZibranR11[418], SchuttFSW09[331], GarridoOS08[127], KrogtLPHJ07[372], Simonis07[344], KhayatLR06[200], Geske05[139], DannaP03[85], Bartak02[33], KamarainenS02[190], Mason01[259], RodosekW98[320]	abs-1902-01193[8] PrataAN23[312], PerezGSL23[299], SquillaciPR23[346], abs-2305-19888[170], abs-2312-13682[300], HeinzNVH22[169] MullerMKP22[272], OuelletQ22[291], PohlAK22[305] abs-2211-14492[348], HillTV21[175], Astrand0F21[20] GeibingerMM21[136], PandeyS21a[294], ZhangYW21[411] Mercier-AubinGQ20[263], QinDCS20[315], SacramentoSP20[322], GalleguillosKSB19[124], Tom19[363], abs-1902-01193[8], DemirovicS18[95], NishikawaSTT18[280] NishikawaSTT18a[281], Madi-WambaLOBM17[252] MossigeGSMC17[269], NattafAL17[277], GayHLS15[128] MurphyMB15[274], NattafAL15[276], PesantRR15[301] PraletLJ15[311], SimoninAHL15[342], WangMD15[392], BartoliniBBLM14[35], AlesioNBG14[99], KelarevaTK13[197], SchutFS13[330], HeinzB12[164], LimtanyakulS12[237], EdisO11[105] TrojetHL11[367], MakMS10[253], SchuttW10[334], Laborie09[220], ArtiouchineB05[18], Wolf805[398], PoderBS04[304] Kumar03[219], Wolf03[397], BeldiceanuC02[42], Bartak02a[32] Timpe02[362], Vilim02[376], ZhuS02[417], HeipckeCCS00[171] BeckDF97[37], Colombani96[84], Wallace96[388], Puget95[313]	

Domain Keyword High		Table 9: Papers by Domain and Keyword				
LacknerMMW21[223], GivmS152[314], NovaraNH16[28], Koschi14[308] SimonisC95[345] AbrenN22[86], AbrenN22[86], CesterSSW22[137], LiF2J.1.22[231], MullenMRP22[273], QinjaxAPR22[296], Deconverse	Domain	Keyword	High	Medium	Low	
Concepts	Concepts	batch process	LacknerMMWW21[223], QinWSLS21[314],		AbreuN22[89], GeitzGSŚW22[137], LiFJZLL22[231], MullerMKP22[272], OujanaAYB22[292], FanXG21[115], Klanke-BYE21[203], ZhangYW21[411], MengZRZL20[262], EscobetPQPRA19[110], FahimiOQ18[113], LaborieRSV18[222], CauwelaertDMS16[76], GrimesH10[149], Simonis07[344], Vil-	
Concepts						
Concepts	Concepts	buffer-capacity				
Concepts PrataAN23[312], JuvinHL23[189],	Concepts	cmax	KameugneFND23[193], YuraszeckMC23[405], YuraszeckMCCR23[406], abs-2305-19888[170], FetgoD22[116], AbreuN22[89], abs-2211-14492[348], ArmstrongGOS21[13], AbohashimaEG21[2], QinWSLS21[314], GodetLHS20[143], MengZRZL20[262], QinDCS20[315], MalapertN19[254], WikarekS19[395], GedikKEK18[132], KameugneFGOQ18[192], VilimLS15[385], OzturkTHO13[293], BillautHL12[54], GrimesH11[150], BeldiceanuCDP11[43], LahimerLH11[225], GrimesH10[149], ZeballosQH10[409], ArtiguesBF04[16],	ArmstrongGOS22[14], BoudreaultSLQ22[67], MullerMKP22[272], Novas19[284], ParkUJR19[297], ArbaouiY18[12], WangMD15[392], ZhouGL15[416], ZhangLS12[413], Muscettola02[275],	JuvinHL23[189], HanenKP21[159], HubnerGSV21[184], ZhangYW21[411], BofillCSV17[57], LiuCGM17[239], SialaAH15[340], KoschB14[208], LiessM08[232], WatsonB08[393], AkkerDH07[370], KeriK07[199], KhayatLR06[200], Baptis-	
	Concepts	completion-time	PrataAN23[312], JuvinHL23[189], KameugneFND23[193], Mehdizadeh-Somarin23[260], FetgoD22[116], AbreuN22[89], OuelletQ22[291], SubulanC22[347], ArmstrongGOS21[13], KlankeBYE21[203], LunardiBLRV20[249], QinDCS20[315], ArbaouiY18[12], FahimiOQ18[113], GedikKEK18[132], KameugneFGOQ18[192], ZhangW18[412], DejemeppeCS15[92], ZhouGL15[416], KoschB14[208], HeinzSB13[168], OuelletQ13[289], OzturkTHO13[293], KelbelH11[198], KovacsB11[210], KovacsK11[212], TrojetHL11[367], Vilim09[380], cpaior-Vilim09[381], KovacsB08[209], ChuX05[79], QuirogaZH05[317], ZeballosH05[408], Wolf03[397], ArtiguesR00[17],	LiFJZLL22[231], MullerMKP22[272], OujanaAYB22[292], abs-2211-14492[348], GeibingerMM21[136], FanXG21[115], HanenKP21[159], QinWSLS21[314], Mercier-AubinGQ20[263], NattafM20[278], BogaerdtW19[371], GeibingerMM19[135], MalapertN19[254], ParkUJR19[297], YangSS19[402], abs-1902-09244[160], abs-1911-04766[134], OuelletQ18[290], CappartS17[73], KreterSS17[217], CauwelaertDMS16[76], ZarandiKS16[407], GaySS14[131], cpaior-SchuttFS13[329], LombardiM12[245], NovasH12[286], EdisO11[105], HermenierDL11[174], GrimesH11[150], KameugneFSN11[194], NovasH10[285], ZeballosQH10[409], LombardiM09[243], MonetteDH09[266], MonetteDD07[265], VilimBC05[384], ArtiguesBF04[16], LimRX04[233], Vilim04[378],	vinHHL23[188], MontemanniD23a[267], PerezGSL23[299], TasselGS23[355], abs-2306-05747[356], ArmstrongGOS22[14], CampeauG22[72], GeitzGSSW22[137], PohlAK22[305], Popovic-CGNC22[307], WinterMMW22[396], ZhangJZL22[410], HubnerGSV21[184], PandeyS21a[294], VikHT21[387], GodetLHS20[143], AstrandJZ20[22], MengZRZL20[262], SacramentoSP20[322], WessenCS20[394], MurinR19[273], Novas19[284], Tesch18[360], MossigeGSMC17[269], FontaineMH16[117], NovaraNH16[283], Tesch16[359], EvenSH15a[112], BurtLPS15[70], EvenSH15[111], Kameugne15[191], KreterSS15[216], LombardiBM15[241], VilimLS15[385], WangMD15[392], AlesioNBG14[99], GrimesIOS14[152], KameugneFSN14[195], NovasH14[287], SchuttFS13[330], BillautHL12[54], HeinzB12[164], LimtanyakulS12[237], HeinzS11[167], ClercqPBJ11[81], LahimerLH11[225], LombardiBMB11[242], SchuttFSW11[332], Vilim11[382], BertholdHLMS10[52], Davenport10[87], LombardiM10[244], DoomsH08[102], WatsonB08[393], AkkerDH07[370], ArtiouchineB05[18], Vilim05[379], WolfS05[398], HentenryckM04[172], Sadykov04[323], Odd-	
Concepts Continuous-process Gayaba4[151], Dartak02[55], 5iiiloiiisC95[545]	Concepts	continuous-process		, mm2001[000], 2nott/[110], G010250[141]	GaySS14[131], Bartak02[33], SimonisC95[345]	

		Table 9: P	apers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	distributed	PrataAN23[312], MengZRZL20[262], He0GLW18[161], ZhouGL15[416], BonfiettiLM14[63], BartakS11[34], HoeveGSL07[373], RossiTHP07[321], GomesHS06[148], Geske05[139]	IsikYA23[186], AbreuN22[89], OujanaAYB22[292], ZhangW18[412], ZarandiKS16[407], AlesioNBG14[99], HermenierDL11[174], LopesCSM10[246], SunLYL10[349], BeniniBGM06[50], ZhuS02[417], SchildW00[327], Wallace96[388]	GurPAE23[157], AkramNHRSA23[7], Bit-Monnot23[55], Kim-CMLLP23[202], MontemanniD23[268], SquillaciPR23[346], YuraszeckMC23[405], abs-2305-19888[170], HeinzNVH22[169], BoudreaultSLQ22[67], LiFJZLL22[231], WinterMMW22[396], abs-2211-14492[348], FanXG21[115], GeibingerKKMMW21[133], BenderWS21[47], KovacsTKSG21[215], PandeyS21a[294], VlkHT21[387], ZhangYW21[411], BarzegaranZP20[36], SacramentoSP20[322], WangB20[390], GalleguillosKSB19[124], EscobetPQPRA19[110], BehrensLM19[40], FrohnerTR19[122], Novas19[284], ParkUJR19[297], WikarekS19[395], abs-1901-07914[41], FahimiOQ18[113], LaborieRSV18[222], NishikawaSTT18[280], NishikawaSTT18a[281], Madi-WambaLOBM17[252], MossigeGSMC17[269], BoothNB16[65], LimHTB16[234], EvenSH15[111], EvenSH15a[112], LombardiBM15[241], GrimesIOS14[152], KoschB14[208], GuSS13[156], BonfiettiLBM12[62], IfrimOS12[185], LombardiM12[245], ClercqPBJ11[81], KelbelH11[198], KovacsB11[210], TopalogluO11[364], TrojetHL11[367], ZibranR11a[419], CobanH10[82], MonetteDH09[266], LauLN08[226], MouraSCL08[271], MouraSCL08a[270], KhemmoudjPB06[201], QuSN06[316], Hooker05[178], AbrilSB05[3], VilimBC05[384], WolfS05[398], Hooker04[177, VilimBC04[388], SakkoutW00[325], PapaB98[296], DincbasSH90[101]
Concepts	due-date	OujanaAYB22[292], AntuoriHHEN21[11], FanXG21[115], Mercier-AubinGQ20[263], TangB20[352], Novas19[284], abs-1902-09244[160], abs-1911-04766[134], Tesch18[360], GoldwaserS17[146], NovaraNH16[283], DoulabiRP14[103], HoundjiSWD14[183], KoschB14[208], LimtanyakulS12[237], KelbelH11[198], NovasH10[285], ZeballosQH10[409], MonetteDH09[266], KrogtLPHJ07[372], Simonis07[344], Hooker06[180], Sadykov04[323], PapaB98[296], Zhou97[415], Colombani96[84], Zhou96[414]	PrataAN23[312], IsikYA23[186], LacknerMMWW23[224], WinterMMW22[396], abs-2211-14492[348], GeibingerMM21[136], LacknerMMWW21[223], GeibingerMM19[135], FahimiOQ18[113], ZarandiKS16[407], GrimesIOS14[152], HeinzSB13[168], GrimesH11[150], Davenport10[87], MakMS10[253], SchuttW10[334], ThiruvadyBME09[361], abs-0907-0939[302], MouraSCL08a[270], Limtanyakul07[236], ChuX05[79], QuirogaZH05[317], ZeballosH05[408], cp-Hooker05[179], ArtiguesR00[17], Belhadji198[46], BeckDF97[37]	abs-2402-00459[279], JuvinHHL23[188], KimCMLLP23[202], YuraszeckMC23[405], MullerMKP22[272], SubulanC22[347], ZhangJZL22[410], HanenKP21[159], HubnerGSV21[184], KlankeBYE21[203], KovacsTKSG21[215], VlkHT21[387], GroleazNS20[154], AstrandJZ20[22], LunardiBLRV20[249], EscobetPQPRA19[110], ParkUJR19[297], GedikKEK18[132], Laborie18a[221], LaborieRSV18[222], Hooker17[181], Pralet17[310], NattafAL15[276], PraletLJ15[311], BillautHL12[54], HeinzB12[164], IfrimOS12[185], LombardiM12[245], EdisO11[105], ClercqPBJ11[81], KovacsB11[210], KovacsK11[212], TrojetHL11[367], LopesCSM10[246], Laborie09[220], AkkerDH07[370], BeldiceanuP07[45], KeriK07[199], KhayatLR06[200], FrankK05[119], Hooker05[178], HentenryckM04[172], PoderBS04[304], ElkhyariGJ02a[108], ElkhyariGJ02[107], Timpe02[362], HeipckeCCS00[171], BaptisteP00[29], BaptisteP97[28], Goltz95[147], SimonisC95[345]
Concepts	earliness	PrataAN23[312], KimCMLLP23[202], PohlAK22[305], abs-1902-09244[160], LaborieRSV18[222], ZarandiKS16[407], LombardiM12[245], GrimesH11[150], KelbelH11[198], Laborie09[220], MonetteDH09[266], KeriK07[199], DannaP03[85]	MengZRZL20[262], KovacsB11[210], Davenport10[87]	abs-2402-00459[279], IsikYA23[186], LacknerMMWW23[224], FanXG21[115], LacknerMMWW21[223], Mercier-AubinGQ20[263], ColT19[83], ZhangW18[412], NovaraNH16[283], LimBTBB15[235], SialaAH15[340], VilimLS15[385], HeinzB12[164], EdisO11[105], KovacsK11[212], NovasH10[285], ZeballosQH10[409], KovacsV06[214], QuirogaZH05[317], Bartak02a[32], Bartak02[33], KamarainenS02[190], ArtiguesR00[17]

		Table 9: P	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	flow-shop	PrataAN23[312], IsikYA23[186], JuvinHL23[189], ArmstrongGOS22[14], AbreuN22[89], LiFJZLL22[231], OujanaAYB22[292], ZhangJZL22[410], ArmstrongGOS21[13], QinWSLS21[314], AstrandJZ20[22], MengZRZL20[262], Novas19[284], ParkUJR19[297], ZhangW18[412], ZhouGL15[416]	Mehdizadeh-Somarin23[260], FanXG21[115], KoehlerBFFHPSSS21[205], TangB20[352], abs-1902-09244[160], LaborieRSV18[222], GrimesH11[150], KovacsB11[210]	AalianPG23[1], JuvinHHL23[188], TasselGS23[355], YuraszeckMCCR23[406], abs-2305-19888[170], abs-2306-05747[356], HeinzNVH22[169], abs-2211-14492[348], HillTV21[175], KovacsTKSG21[215], LacknerMMWW21[223], PandeyS21a[294], LunardiBLRV20[249], SacramentoSP20[322], WallaceY20[389], WikarekS19[395], ZarandiKS16[407], OzturkTHO13[293], BillautHL12[54], LombardiM12[245], KovacsK11[212], GrimesH10[149], BarlattCG08[31], LauLN08[226], QuirogaZH05[317], BaptisteP00[29], SchildW00[327], KorbaaYG99[206], PapaB98[296], BaptisteP97[28], SimonisC95[345]
Concepts	${ m flow-time}$	FanXG21[115], NattafM20[278], MalapertN19[254], ZhangW18[412]	PrataAN23[312]	TasselGS23[355], YuraszeckMC23[405], YuraszeckM-CCR23[406], abs-2306-05747[356], AbreuN22[89], LiFJ-ZLL22[231], KoehlerBFFHPSSS21[205], MengZRZL20[262], Novas19[284], ParkUJR19[297], EdisO11[105], KovacsB11[210], QuirogaZH05[317]
Concepts	inventory	SubulanC22[347], GilesH16[140], GoelSHFS15[144], SerraNM12[335], LopesCSM10[246], RossiTHP07[321], Timpe02[362], BeckDF97[37]	Novas19[284], MakMS10[253], LauLN08[226], MouraSCL08a[270], GarganiR07[125], DavenportKRSH07[88]	PrataAN23[312], GurPAE23[157], PerezGSL23[299], abs-2312-13682[300], AbreuN22[89], PohlAK22[305], HubnerGSV21[184], KovacsTKSG21[215], GroleazNS20[154], WikarekS19[395], abs-1902-09244[160], LaborieRSV18[222], ShinBBHO18[338], SchuttS16[333], SimoninAHL15[342], HoundjiSWD14[183], KelarevaTK13[197], HeinzSSW12[166], LombardiM12[245], KelbelH11[198], Laborie09[220], MouraSCL08[271], KrogtLPHJ07[372], QuirogaZH05[317], SimonisC95[345]

		Table 9: P	apers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	job	PrataAN23[312], abs-2402-00459[279], Bit-Monnot23[55], IsikYA23[186], JuvinHH123[188], JuvinHL23[189], KimCMLLP23[202], LacknerMMWW23[224], Mehdizadeh-Somarin23[260], TasselGS23[355], WangB23[391], YuraszeckMC23[405], YuraszeckMCCR23[406], abs-2306-05747[356], AbreuN22[89], ArmstrongGOS22[14], GeitzGSSW22[137], LiFJZLL22[231], MullerMKP22[272], OujanaAYB22[292], WinterMMW22[396], ZhangJZL22[410], abs-2211-1449[348], Astrand0F21[20], HillTV21[175], ArmstrongGOS21[13], GeibingerMM21[136], FanxG21[115], KoehlerBFFHPSSS21[205], KovacsTKSG21[215], LacknerMMWW21[223], PandeyS21a[294], QinWSLS21[314], ZhangYW21[411], AstrandJZ20[22], GodetLHS20[143], GroleazNS20[154], BenediktMH20[48], LunardiBLRV20[249], MengZRZL20[262], NattafM20[278], SacramentoSP20[322], TangB20[352], WallaceY20[389], WangB20[390], GalleguillosKSB19[124], BogaerdtW19[371], GeibingerMM19[135], ColT19[83], MalapertN19[254], MurinR19[273], Novas19[284], ParkUJR19[297], WikarekS19[395], abs-1902-09244[160], abs-1911-04766[134], GedikKEKK18[132], ArbaouiY18[12], FahimiOQ18[113], BenediktSMVH18[49], Laborie18a[221], LaborieRSV18[222], Tesch18[360], ZhangW18[412], Hooker17[181], Madi-WambaLOBM17[252], MossigeGSMC17[269], Pralet17[310], CauwelaertDMS16[76], FontaineMH16[117], Tesch16[359], DejemeppeCS15[92], SialaAH15[340], VilimLS15[385], BartolimBBLM14[35], GaySS14[131], DejemeppeD14[93], KoschB14[208], NovasH14[286], RendlPHPR12[318], BeilautHL12[54], LimtanyakulS12[237], NovasH12[286], RendlPHPR12[318], EdisO11[105], HeinzS11[167], GrimesH11[150], KelbelH11[198], KovacsB11[210], LahimerLH11[225], BertholdHLMS10[52], GrimesH0[489], CobanH10[82], MakMS10[253], NovasH0[285], GrimesHM09[151], AronssonBK09[15], LaborieO9[220], MonetteDD07[265], KhayatLR06[200], DilkinaDH05[100], ChuX05[79], ArtiouchineB05[18], VilimDS[379], VilimBC05[384], ZeballosH05[408], ArtiguesBF04[16], HentenryckM04[172], LimRX04[233], Sadykov04[323], VilimBC04[383], DannaP03[85], Wolf03[397], HookerY02[182], HeipckeCCS00[171], ArtiguesR00[17], SakkoutW00[325], SchildW00[327], Belhad	EfthymiouY23[106], abs-2305-19888[170], HeinzNVH22[169], HanenKP21[159], Mercier-AubinGQ20[263], EscobetPQPRA19[110], Tom19[363], PourDERB18[308], CappartS17[73], NattafAL17[277], Madi-WambaB16[251], ZarandiKS16[407], LetortCB15[230], PraletLJ15[311], ZhouGL15[416], BonfiettiLM14[63], LombardiM12[245], KovacsK11[212], Simonis07[344], Hooker06[180], KovacsV06[214], Hooker05[178], HebrardTW05[162], Geske05[139], KovacsV04[213], VerfaillieL01[375], BaptisteP00[29], Caseau97[75], BaptisteP97[28], Puget95[313]	PovedaAA23[309], CampeauG22[72], PohlAK22[305], AntuoriHHEN21[11], BenderWS21[47], HubnerGSV21[184], KlankeBYE21[203], QinDCS20[315], WessenCS20[394], FrimodigS19[121], BaptisteB18[26], ShinBBH018[338], HechingH16[163], NovaraNH16[283], BurtLPS15[70], WangMD15[392], DerrienPZ14[98], AlesioNBG14[99], BessiereHMQW14[53], KameugneFSN14[195], BonfiettiLBM12[62], IfrimOS12[185], HachemiGR11[158], BonfiettiLBM12[62], IfrimOS12[185], HachemiGR11[158], BonfiettiLBM13[63], ZeballosQH10[409], SchuttFSW0[331], Vilim09[380], BarlattCG08[31], KovacsB08[209], LiessM08[232], HoeveGSL07[373], KerikO7[199], KrogtLPHJ07[372], FrankK05[119], KovacsEKV05[211], WuBB05[401], cp-Hooker05[179], Vilim04[378], ValleMGT03[369], Vilim03[377], Bartak02a[32], Bartak02[32], AngelsmarkJ00[10], KorbaaYG99[206], CestaOS98[77], Wallace96[388], DincbasSH90[101]

		Table 9: I	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	job-shop	PrataAN23[312], abs-2402-00459[279], Bit-Monnot23[55], JuvinHHL23[188], KimCMLLP23[202], Mehdizadeh-Somarin23[260], TasselGS23[355], YuraszeckMCCR23[406], abs-2306-05747[356], GeitzGSSW22[137], LiFJZLL22[231], MullerMKP22[272], OujanaAYB22[292], abs-2211-14492[348], FanXG21[115], KovacsTKSG21[215], ZhangYW21[411], AstrandJZ20[22], LunardiBLRV20[249], MengZRZL20[262], ColT19[83], MurinR19[273], Novas19[284], FahimiOQ18[113], LaborieRSV18[222], ZhangW18[412], Pralet17[310], FontaineMH16[117], CauwelaertDMS16[76], DejemeppeCS15[92], SialaAH15[340], VilimLS15[385], SchuttFS13[330], BillautHL12[54], GrimesH11[150], KelbelH11[198], KovacsB11[210], GrimesH10[149], GrimesHM09[151], MonetteDH09[266], WatsonB08[393], MonetteDH09[266], KhayatLR06[200], DilkinaDH05[100], ArtiouchineB05[18], Vilim05[379], ArtiguesBF04[16], HentenryckM04[172], DannaP03[85], Wolf03[397], ArtiguesR00[17], SakkoutW00[325], SchildW00[327], Belhadji198[46], PapaB98[296], BeckDF97[37], Zhou97[415], Colombani96[84], Zhou96[414], Goltz95[147]	EfthymiouY23[106], IsikYA23[186], AbreuN22[89], Astrand0F21[20], ArmstrongGOS21[13], KoehlerBFHPSSS21[205], QinWSLS21[314], GroleazNS20[154], SacramentoSP20[322], EscobetPQPRA19[110], WikarekS19[395], CappartS17[73], MossigeGSMC17[269], BonflettiLM14[63], GaySS14[131], LombardiM12[245], AronssonBK09[15], LauLN08[226], KovacsV06[214], HebrardTW05[162], Geske05[139], VilimBC05[384], KovacsV04[213], VilimBC04[383], BaptisteP00[29], Caseau97[75], BaptisteP97[28], Puget95[313], SimonisC95[345]	JuvinHL23[189], LacknerMMWW23[224], PovedaAA23[309], YuraszeckMC23[405], HanenKP21[159], AntuoriH-HEN21[11], KlankeBYE21[203], BenediktMH20[48], Mercier-AubinGQ20[263], WallaceY20[389], WessenCS20[394], FrimodigS19[121], BogaerdtW19[371], ParkUJR19[297], Tom19[363], abs-1902-09244[160], BenediktSMVH18[49], ZarandiKS16[407], BurtLPS15[70], LimBTBB15[235], LombardiBM15[241], PraletLJ15[311], WangMD15[392], ZhouGL15[416], AlesioNBG14[99], DejemeppeD14[93], KameugneFSN14[195], KoschB14[208], NovasH14[287], HeinzKB13[165], BonfiettiLBM12[62], BonfiettiLBM11[61], HachemiGR11[158], KameugneFSN11[194], KovacsK11[212], TrojetHL11[367], LopesCSM10[246], ZeballosQH10[409], Laborie09[220], Vilim09[380], BarlattCG08[31], DoomsH08[102], LiessM08[232], HoeveGSL07[373], DavenportKRSH07[88], KeriK07[199], KrogtLPHJ07[372], Simonis07[344], KovacsEKV05[211], Vilim04[378], ValleMGT03[369], Vilim03[377], Bartak02a[32], Bartak02[33], KamarainenS02[190], Muscettola02[275], VerfaillieL01[375], AngelsmarkJ00[10], HeipckeCCS00[171], KorbaaYG99[206], Wallace96[388], DincbasSH90[101]
Concepts	lateness	FahimiOQ18[113], KoschB14[208], Geske05[139], ArtiguesR00[17]	PrataAN23[312], PohlAK22[305], ZhangW18[412], AkkerDH07[370], Sadykov04[323]	LacknerMMWW23[224], GeitzGSSW22[137], HanenKP21[159], KoehlerBFFHPSS21[205], LacknerMMWW21[223], Qin-WSLS21[314], Novas19[284], ParkUJR19[297], Tesch18[360], EdisO11[105], NovasH10[285], Bartak02[33]
Concepts	lazy clause generation	KreterSS17[217], KreterSS15[216], KelarevaTK13[197], SchuttFS13[330], cpaior-SchuttFS13[329], SchuttFSW11[332], SchuttFSW09[331]	Bit-Monnot23[55], PovedaAA23[309], GeitzGSSW22[137], BoudreaultSLQ22[67], OuelletQ22[291], FahimiOQ18[113], SchuttS16[333], SzerediS16[351], SialaAH15[340], BofillEGPSV14[58], GuSS13[156], SchuttCSW12[328]	KameugneFND23[193], TardivoDFMP23[354], WangB23[391], FetgoD22[116], HillTV21[175], GeibingerMM21[136], GodetLHS20[143], Mercier-AubinGQ20[263], WallaceY20[389], YangSS19[402], BaptisteB18[26], GoldwaserS17[146], BofillCSV17[57], YoungFS17[403], PesantRR15[301], LombardiM12[245], GrimesH11[150], SchuttW10[334]

		Table 9: I	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	machine	PrataAN23[312], abs-2402-00459[279], AalianPG23[1], EfthymiouY23[106], IsikYA23[186], JuvinHHL23[188], JuvinHL23[189], KimCMLLP23[202], LacknerMMWW23[224], Mehdizadeh-Somarin23[260], PerezGSL23[299], TasselGS23[355], YuraszeckMC23[405], YuraszeckMCCR23[406], abs-2305-19888[170], abs-2306-0574[356], abs-2312-136882[300], HeinzNVH22[169], AbreuN22[89], GeitzGSSW22[137], ArmstrongGOS22[14], LiFJZLL22[231], MullerMKP22[272], OujanaAYB22[292], WinterMMW22[396], ZhangJZL2[410], abs-2211-14492[348], HanenKP21[159], BenderWS21[47], Astrand0F21[20], AntuoriHHEN21[11], FanXC21[115], ArmstrongGOS2[13], HubnerGSV21[184], KoehlerBFFHPSSS21[205], KovacsTKSG21[215], LacknerMMWW21[223], PandeyS21a[294], QinWSLS21[314], ZhangYW21[411], AstrandJZ20[22], GodetLHS20[143], BenediktMH20[48], GroleazNS20[154], LunardiBLRV20[249], MengZRZL20[262], NattafM20[278], QinDCS20[315], SacramentoSP20[322], TangB20[352], GalleguillosKSB19[124], FrimodigS19[121], EscobetPQPRA19[110], BogaerdtW19[371], ColT19[83], MalapertN19[254], MurinR19[273], Novas19[284], ParkUJR19[297], WikarekS19[395], abs-1901-07914[41], abs-1902-09244[160], AstrandJZ18[21], GedikKEK18[132], ArbaouiY18[12], BenediktSMVH18[49], LaborieRSV18[222], Tesch18[360], ZhangW18[412], Madi-WambaLOBM17[252], MossigeGSMC17[269], FontaineMH16[117], BurtLPS15[70], KreterSS15[216], VilimLS15[385], ZhouGL15[416], BessiereHMQW14[53], BartoliniBBLM14[35], GrimesIOS14[152], HoundjiSWD14[183], KoschB14[208], NovasH14[287], OzturkTH013[293], SchuttFS13[330], BillautHL12[54], IfrimOS12[185], LimtanyakulS12[237], EdisO11[105], GrimesHM09[151], Laborie09[220], MonetteDH09[266], ThiruvadyBME09[361], LiessM08[232], WatsonB08[393], AkkerDH07[370], DavenportKRSH07[88], LimtanyakulS12[237], EdisO11[105], GrimesHM09[151], Laborie09[220], MonetteDH09[266], ThiruvadyBME09[361], LiessM08[232], WatsonB08[393], AkkerDH07[370], DavenportKRSH07[88], LimtanyakulS12[288], ValleMGT03[336], Wil03[397], BeldiceanuC02[42], Bartak02a[32], Timpe02[362], ValleMGT03[3369], Wil03[397], BeldiceanuC02[42], Bartak02a[32],	AkramNHRSA23[7], Bit-Monnot23[55], GurPAE23[157], HillTV21[175], AbohashimaEG21[2], KlankeBYE21[203], BehrensLM19[40], FahimiOQ18[113], BaptisteB18[26], He0GLW18[161], ShinBBH018[338], GoldwaserS17[146], KreterSS17[217], Pralet17[310], CauwelaertDMS16[76], SchuttS16[333], ZarandiKS16[407], DejemeppeCS15[92], MurphyMB15[274], SialaAH15[340], GaySS14[131], BonfiettiLBM12[62], LombardiM12[245], KelbelH11[198], SchuttFSW09[331], KovacsB08[209], LauLN08[226], KovacsV06[214], ChuX05[79], Vilim05[379], VilimBC05[384], VilimBC04[383], HookerY02[182], SakkoutW00[325], Wallace96[388]	KameugneFND23[193], MontemanniD23[268], Boudreault-SLQ22[67], PohlAK22[305], PopovicCGNC22[307], SubulanC22[347], GeibingerMu21[136], BarzegaranZP20[36], Mercier-AubinGQ20[263], WallaceY20[389], WangB20[390], Tom19]363], YangSS19[402], Laborie18a[221], Pour-DERB18[308], BoiflCSV17[57], CapartS17[73], KletzanderM17[204], LiuCGM17[239], YoungFS17[403], BoothNB16[65], LimHTB16[234], NovaraNH16[283], SzerediS16[351], GoelSHFS15[144], EvenSH15[111], BofilGSV15[59], EvenSH15a[112], LetortCB15[230], LimBTBB15[235], LombardiBM15[241], MelgarejoLS15[6], cpaior-GayHS15[130], BofilEGPSV14[58], BonfiettiLM14[63], DerrienPZ14[98], GuSS13[166], HeinzB12[164], LetortCB13[229], cpaior-SchuttFS13[329], HeinzB12[164], LetortBC12[228], NovasH12[286], RendIPHPR12[318], SerraNM12[335], HermenierDL11[174], HeinzS11[167], BonfiettiLBM11[61], LombardiBMB11[242], TrojetHL11[367], Vilim11[382], NovasH0[285], BarlattCG08[31], GarridoS08[127], DoomsH08[102], GarganiR07[125], HoeverGSL07[373], KrogtLPHJ07[372], Hooker06[180], HebrardTW05[162], Hooker05[178], cp-Hooker05[179], Hooker04[177], KovasCv04[213], LimRX04[233], PoderBS04[304], Vilim04[378], Wolinsik(R004[399], DannaP03[85], Barlatk02[33], ElkhyariGJ02[107], KamarainenS02[190], MartinPY01[258], ArtiguesR00[17], RodosekW98[320], BeckDF97[37], Simonis95[343], SimonisC95[345], DincbasSH90[101]

		Table 9: I	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	make to order			OujanaAYB22[292], DavenportKRSH07[88], Simonis07[344]
Concepts Concepts	make to stock make-span	PrataAN23[312], EfthymiouY23[106], Bit-Monnot23[55], AalianPG23[1], IsikYA23[186], JuvinHHL23[188], JuvinHL23[189], LacknerMMWW23[224], Mehdizadeh-Somarin23[260], PovedaAA23[309], TasselGS23[355], YuraszeckMC23[405], abs-2305-19888[170], abs-2306-05747[356], AbreuN22[89], GeitzGSSW22[137], BoudreaultSLQ22[67], ArmstrongGOS22[14], HeinzNVH22[169], SubulanC22[347], Astrand0F21[20], ArmstrongGOS21[13], HillTV21[175], BenderWS21[47], KlankeBYE21[203], LacknerMMWW21[223], QinWSLS21[314], ZhangYW21[411], GodetLHS20[143], AstrandJZ20[22], LunardiBLRV20[249], MengZRZL20[262], WessenCS20[394], BehrensLM19[40], ColT19[83], GalleguillosKSB19[124], MalapertN19[254], Novas19[284], ParkUJR19[297], WikarekS19[395], abs-1901-07914[41], abs-1902-09244[160], BaptisteB18[26], FahimiOQ18[113], GedikKEK18[132], LaborieRSV18[222], ZhangW18[412], BofillCSV17[57], MossigeGSMC17[269], Pralet17[310], NovaraNH16[283], SzerediS16[351], BurtLPS15[70], LombardiBM15[241], VilimLS15[385], WangMD15[392], ZhouGL15[416], BonfiettiLM14[63], BartoliniBBLM14[35], DerrienPZ14[98], DejemeppeD14[93], KoschB14[208], NovasH14[287], OzturkTHO13[293], SchuttFS13[330], cpaior-SchuttFS13[329], BonfiettiLBM12[62], NovasH12[286], GrimesH11[150], LombardiBMB11[242], SchuttFSW11[332], GrimesH10[149], CobanH10[82], NovasH10[285], ZeballosQH10[409], GrimesHM09[151], GarridoAO09[126], GarridoOS08[127], WatsonB08[393], KhayatLR06[200], KovacsV06[214], Hooker05[178], DilkinaDH05[100], FortinZDF05[118], ZeballosH05[408], Hooker04[177], HentenryckM04[172], ArtiguesBF04[16], BaptisteP00[29], ArtiguesR00[17], KorbaaYG99[206], PapaB98[296], BeckDF97[37],	KameugneFND23[193], PerezGSL23[299], YuraszeckMCCR23[406], abs-2312-13682[300], LiFJZLL22[231], MullerMKP22[272], OujanaAYB22[292], ZhangJZL22[410], abs-2211-14492[348], FanXG21[115], PandeyS21a[294], QinDCS20[315], AstrandJZ18[21], KreterSS17[217], YoungFS17[403], BonfiettiZLM16[64], DejemeppeCS15[92], GayHLS15[128], SialaAH15[340], KameugneFSN14[195], GuSS13[156], BillautHL12[54], LombardiM12[245], SchuttCSW12[328], KovacsB11[210], TrojetHL11[367], LombardiM09[243], ThiruvadyBME09[361], LiessM08[232], AkkerDH07[370], MonetteDD07[265], QuirogaZH05[317], Vilim05[379], VilimBC05[384], KovacsV04[213], VilimBC04[383], Wolf03[397], Timpe02[362]	KimCMLLP23[202], TardivoDFMP23[354], CampeauG22[72], FetgoD22[116], PopovicCGNC22[307], HanenKP21[159], HubnerGSV21[184], KoehlerBFFHPSSS21[205], Mercier-AubinGQ20[263], NattafM20[278], SacramentoSP20[322], TangB20[352], GeibingerMM19[135], MurinR19[273], Tom19[363], abs-1911-04766[134], ArbaouiY18[12], Kameugne-FGOQ18[192], NishikawaSTT18[280], NishikawaSTT18a[281], OuelletQ18[290], Tesch18[360], NattafAL17[277], Cauwelaert-DMS16[76], FontaineMH16[117], SchuttS16[333], Tesch16[359], ZarandiKS16[407], KreterSS15[216], LetortCB15[230], NattafAL15[276], PraletLJ15[311], SimoninAHL15[342], DerrienP14[97], GaySS14[131], AlesioNBG14[99], CireCH13[80], KelarevaTK13[197], LetortCB13[229], OuelletQ13[289], LetortBC12[228], EdisO11[105], HachemiGR11[158], BonfiettLBM11[61], KameugneFSN11[194], KelbelH11[198], LahimerLH11[225], LombardiM10[244], LopesCSM10[246], SchuttW10[334], MonetteDH09[266], SchuttFSW09[331], abs-0907-0939[302], KeriKO7[199], Limtanyakul07[236], BeniniBGM06[50], Hooker06[180], LiuJ06[240], ArtiouchineB05[18], CarchraeBF05[74], WuBB05[401], cp-Hooker05[179], ValleMGT03[369], Bartak02a[32], Bartak02[33], ElkhyariGJ02[107], HeipckeCCS00[171], RodosekW98[320], Caseau97[75]
Concepts	manpower	Darby-DowmanLMZ97[86], BaptisteP97[28] NovaraNH16[283]	LaborieRSV18[222]	WikarekS19[395], BaptisteB18[26], HechingH16[163], SchuttS16[333], cpaior-GayHS15[130], GaySS14[131], LombardiM12[245], Vilim11[382], NovasH10[285], Puget95[313],

	Table 9: Papers by Domain and Keyword				
Domain	Keyword	High	Medium	Low	
Concepts	multi-agent	BehrensLM19[40], He0GLW18[161], HoeveGSL07[373]	abs-1901-07914[41], LimHTB16[234]	abs-2402-00459[279], Mehdizadeh-Somarin23[260], Squil-laciPR23[346], ZhangYW21[411], WessenCS20[394], WikarekS19[395], ZhangW18[412], LimBTBB15[235], KoschB14[208], BartakS11[34], GomesHS06[148], AbrilSB05[3], Wallace96[388]	
Concepts	no preempt			FanXG21[115], MengZRZL20[262], ParkUJR19[297], Monet-teDD07[265], ArtiguesR00[17]	
Concepts	open-shop	PrataAN23[312], Bit-Monnot23[55], AbreuN22[89], FahimiOQ18[113], GrimesHM09[151], MonetteDD07[265]	MengZRZL20[262], SacramentoSP20[322], GrimesH10[149], Vilim05[379]	KimCMLLP23[202], YuraszeckMC23[405], YuraszeckM-CCR23[406], OujanaAYB22[292], Astrand0F21[20], AstrandJZ20[22], ParkUJR19[297], SialaAH15[340], AlesioNBG14[99], BonfiettiLM14[63], BillautHL12[54], GrimesH11[150], SchuttFSW11[332], SchuttFSW09[331], ThiruvadyBME09[361], ArtiouchineB05[18], VilimBC05[384], HentenryckM04[172], VilimBC04[383], Vilim03[377], ElkhyariGJ02a[108], VerfaillieL01[375]	

Domain	Keyword	High	Medium	Low
Concepts	order	PrataAN23[312], abs-2402-00459[279], EfthymiouY23[106], Bit-Monnot23[55], AalianPG23[1], IsikYA23[186], JuvinHHL23[188], JuvinHL23[189], KameugneFND23[193], KimCMLLP23[202], LacknerMMW23[224], PerezGSL23[299], PovedaAA23[300], SquillaciPR23[346], TasselGS23[355], WangB23[391], YuraszeckMCCR23[406], abs-2306-05747[356], abs-2312-13682[300], AbreuN22[89], CampeauG22[72], GeitzGSSW22[137], BoudreauItSLQ22[67], FetgoD22[116], LiFJZLL22[231], MullerMKP22[272], OujanaAYB22[292], PohlAK22[305], PopovicCGNC22[307], SubulanC22[347], abs-2211-14492[348], FanXG21[115], AntuoriHHEN21[11], HanenKP21[159], Astrand0F21[20], ArmstrongGOS21[13], HubnerGSV21[184], KlankeBYE21[203], KoehlerBFFHPSSS21[205], KovacsTKSG21[215], LacknerMMWW21[223], PandeyS21a[294], QinWSLS21[314], VlkHT21[387], GroleazNS20[154], AstrandJZ20[22], GodetLHS20[143], BenediktMH20[48], BarzegaranZP20[36], LunardiBLRV20[249], MengZRZL20[262], Mercier-AubinGQ20[263], NattafM20[278], SacramentoSP20[32], WangB20[390], WessenCS20[394], FrimodigS19[121], EscobetPQPRA19[110], GeibingerMM19[135], BehrensLM19[40], LiuLH19[238], MalapertN19[254], MurinR19[273], Novas19[284], ParkUJR19[297], WikarekS19[395], YangSS19[402], abs-1901-07914[41], abs-1902-09244[160], abs-1911-04766[134], GedikKEK18[132], AstrandJZ18[21], FahimiOQ18[113], KameugneFGOQ18[192], LaborieRSV18[222], NishikawaSTT18[280], NishikawaSTT18a[281], OuelletQ18[290], PourDERB18[308], Tesch18[360], ZhangW18[412], CappartS17[73], GoldwaserS17[146], KletzanderM17[204], KreterSS17[217], LiuCGM17[239], Madi-WambaLOBM17[252], MossigeGSMC17[269], Pralet17[310], YoungFS17[403], BoothNB16[65], BonfiettiZLM16[64], CauwelaertDMS16[76], Madi-WambaB16[251], NovaraNH16[283], SchuttS16[333], Tesch18[339], ZarandiKS16[407], EvenSH15[111], DejemeppeCS15[92], GoelSHFS15[144], LetortCB15[230], LimBTBB15[235], LombardiBM15[241], MelgarejoLS15[6], MurphyMB15[274], NattafAL15[276], PraletLJ15[311], SialaAH15[340], SimoninAHL15[342], VilimLS15[385], WangMD15[392], ZhouGL15[416], GnimesIOS14[152], DerrienP14[98], AlesioNBG14[GurPAE23[157], MontemanniD23a[267], TardivoDFMP23[354], YuraszeckMC23[405], abs-2305-19888[170], HeinzNVH22[169], ArmstrongGOS22[14], OuelletQ22[291], WinterMMW22[396], BenderWS21[47], HillTV21[175], GeibingerMM21[136], QinDCS20[315], TangB20[352], WallaceY20[389], FrohnerTR19[122], BogaerdtW19[371], ColT19[83], BaptisteB18[26], DemirovicS18[95], ShinBBHO18[338], BofillCSV17[57], GelainPRVW17[138], NattafAL17[277], GilesH16[140], FontaineMH16[117], LimHTB16[234], GayHS15[129], BurtLPS15[70], BofillGSV15[59], KreterSS15[216], PesantR15[301], DejemeppeD14[93], CireCH13[80], BonfiettiLBM12[62], LahimerLH11[225], LombardiBMB11[242], ZibranR11[418], Davenport10[87], AronssonBK09[15], SchuttFSW09[331], Vilim09[380], abs-0907-0939[302], cpaior-Vilim09[381], LauLN08[226], HoeveGSL07[373], BeldiceanuP07[45], KeriK07[199], BeniniBGM06[50], KhayatLR06[200], LiuJ06[240], Hooker05[178], FortinZDF05[118], ArtiouchineB05[18], Hooker04[177], HentenryckM04[172], WolinskiKG04[399], KuchcinskiW03[218], ElkhyariGJ02a[108], KamarainenS02[190], Muscettola02[275], ArtiguesR00[17], FrostD98[123], Belhadji198[46], Caseau97[75], Puget95[313], Touraivane95[366]	AkramNHRS.A23[7], Mehdizadeh-Somarin23[260], MonanniD23[268], Zhang JZL.22[410], AbohashimaEG21 Zhang YW21[411], GalleguillosKSB19[124], abs-1902-01193 ArbaouiY18[12], HeoGLW18[161], BenediktSMVH18[4 Hooker17[181], HechingH16[163], SzerediS16[351], cpai GayHS15[130], DoulabiRP14[103], HeinzKB13[165], GuSS13[15]; SchuttFS13[330], HeinzB12[164], BonfiettiLBM11[6 ChapadosJR11[78], BertholdHLMS10[52], CobanH10[8]; MakMS10[253], SunLYL10[349], Acuna-AgostMFG09] ThiruvadyBME09[361], DomsH08[102], LiessM08[23 AkkerDH07[370], Limtanyakul07[236], GomesHS06[148], IbrardTW05[162], Geske05[139], CarchraeBF05[74], ChuX05[7 AbrilSB05[3], DannaP03[85], Kumar03[219], Vilim03[37 HookerY02[182], AngelsmarkJ00[10], RodosekW98[32 BeckDF97[37], Simonis95[343]

KameugneFSN14[195], KoschB14[208], NovasH14[287], HeinzSB13[168], KelarevaTK13[197], LetortCB13[229]

		Table 9: F	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	precedence	abs-2402-00459[279], IsikYA23[186], JuvinHHL23[188], PovedaAA23[309], YuraszeckMCCR23[406], BoudreaultSLQ22[67], FetgoD22[116], CampeauG22[72], PohlAK22[305], GeibingerMM21[136], HanenKP21[159], ArmstrongGOS21[13], FanXG21[115], Astrand0F21[20], HillTV21[175], HubnerGSV21[184], KoehlerBFFHPSSS21[205], ZhangYW21[411], GroleazNS20[154], AstrandJZ20[22], LunardiBLRV20[249], MengZRZL20[262], Mercier-AubinGQ20[263], SacramentoSP20[322], WikarekS19[395], abs-1902-09244[160], FahimiOQ18[113], Laborie18a[221], LaborieRSV18[222], NishikawaSTT18[280], NishikawaSTT18a[281], Tesch18[360], ZhangW18[412], BofillCSV17[57], Pralet17[310], YoungFS17[403], BonfiettiZLM16[64], NovaraNH16[283], SchuttS16[333], SzerediS16[351], DejemeppeCS15[92], LetortCB15[230], MelgarejoLS15[6], PraletLJ15[311], SimoninAHL15[342], DerrienPZ14[98], HeinzSB13[168], OuelletQ13[289], OzturkTHO13[293], SchuttFS13[330], BonfiettiLBM12[62], LombardiM12[245], SchuttCSW12[328], ClercqPBJ11[81], GrimesH11[150], BonfiettiLBM11[61], KelbelH11[198], LombardiBMB11[242], SchuttFSW11[332], TrojetHL11[367], LombardiM09[243], MonetteDH09[266], SchuttFSW09[331], LiessM08[232], AkkerDH07[370], HoeveGSL07[373], BeninlBGM06[50], KhayatLR06[200], KovacsV06[214], Hooker05[178], Vilim05[379], VilimBC05[384], ArtiguesBF04[16], HentenryckM04[172], KovacsV04[213], Vilim04[378], ValleMGT03[369], ElkhyariGJ02a[108], Bartak02a[32], Muscettola02[275], VanczaM01[374], HeipckeCCS00[171], BaptisteP00[29], ArtiguesR00[17], SchildW00[327], BaptisteP97[28], DincbasSH90[101]	Bit-Monnot23[55], KameugneFND23[193], TardivoDFMP23[354], OujanaAYB22[292], SubulanC22[347], AntuoriHHEN21[11], VlkHT21[387], QinDCS20[315], WessenCS20[394], BogaerdtW19[371], GeibingerMM19[135], ColT19[83], MurinR19[273], Novas19[284], abs-1911-04766[134], KameugneFGOQ18[192], Madi-WambaLOBM17[252], MossigeGSMC17[269], Madi-WambaB16[251], GayHLS15[128], BurtLPS15[70], LombardiBM15[241], VllimLS15[385], WangMD15[392], BonfiettiLM14[63], KameugneFSN14[195], cpaior-SchuttFS13[329], BillautHL12[54], LimtanyakulS12[237], NovasH12[286], SimoninAHL12[341], HachemiGR11[158], KameugneFSN11[194], GrimesH10[149], LopesCSM10[246], MakMS10[253], NovasH10[285], ZeballosQH10[409], GrimesHM09[151], MouraSCL08[271], DavenportKRSH07[88], KeriK07[199], Hooker06[180], DilkinaDH05[100], FortinZDF05[118], ZeballosH05[408], Hooker04[177], PoderBS04[304], VilimBC04[383], WolinskiKG04[399], Belhadji198[46], BeckDF97[37], Zhou97[415], Zhou96[414]	PrataAN23[312], JuvinHL23[189], KimCMLLP23[202], Mehdizadeh-Somarin23[260], TasselGS23[355], YuraszeckMC23[405], abs-2305-19888[170], abs-2306-05747[356], GeitzGSSW22[137], HeinzNVH22[169], MullerMKP22[272], WinterMMW22[396], ZhangJZL22[410], abs-2211-14492[348], KovacsTKSG21[215], PandeyS21a[294], TangB20[352], DemirovicS18[95], BaptisteB18[26], He0GLW18[161], OuelletQ18[290], CappartS17[73], KreterSS17[217], FontaineMH16[117], CauwelaertDMS16[76], BoothNB16[65], Tesch16[359], GoelSHFS15[144], GayHS15[129], SialaAH15[340], DejemeppeD14[93], GaySS14[131], HoundjiSWD14[183], NovasH14[287], GuSS13[156], CireCH13[80], KelarevaTK13[197], LetortCB13[229], HeinzB12[164], LetortBC12[228], SerraNM12[335], HermenierDL11[174], KovacsB11[210], LahimerLH11[225], Vilim11[382], BertholdHLMS10[52], Laborie09[220], Vilim09[380], KrogtLPHJ07[372], Limtanyakul07[236], MonetteDD07[265], QuSN06[316], FrankK05[119], ArtiouchineB05[18], KovacsEKV05[211], QuirogaZH05[317], cp-Hooker05[179], Sadykov04[323], KuchcinskiW03[218], OddiPCC03[288], Bartak02[33], ElkhyariGJ02[107], KamarainenS02[190], Vilim02[376], SakkoutW00[325], Colombani96[84], Goltz95[147], Simonis95[343]

		Table 9: I	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	preempt	JuvinHHL23[188], PovedaAA23[309], SubulanC22[347], HanenKP21[159], FahimiOQ18[113], BaptisteB18[26], ZarandiKS16[407], EvenSH15[111], EvenSH15a[112], AlesioNBG14[99], LombardiM12[245], BeldiceanuCDP11[43], KovacsB11[210], MonetteDD07[265], Wolf03[397], BaptisteP00[29], PapaB98[296], BaptisteP97[28]	PrataAN23[312], abs-2305-19888[170], FetgoD22[116], HeinzNVH22[169], OuelletQ22[291], LunardiBLRV20[249], Mercier-AubinGQ20[263], SacramentoSP20[322], YoungFS17[403], NattafAL15[276], SimoninAHL15[342], OzturkTHO13[293], SimoninAHL12[341], SchuttFSW11[332], Laborie09[220], SchuttFSW09[331], KovacsB08[209], ArtiouchineB05[18]	AkramNHRSA23[7], AalianPG23[1], IsikYA23[186], KameugneFND23[193], Mehdizadeh-Somarin23[260], TardivoDFMP23[354], TasselGS23[355], YuraszeckMC23[405], YuraszeckMCCR23[406], abs-2306-05747[356], AbreuN22[89], BoudreaultSLQ22[67], GeitzGSSW22[137], MullerMKP22[272], OujanaAYB22[292], FanXG21[115], HillTV21[175], ArmstrongGOS21[13], BenderWS21[47], HubnerGSV21[184], KovacsTKSG21[215], QinWSLS21[314], ZhangYW21[411], BenediktMH20[48], GroleazNS20[154], MengZRZL20[262], ParkUJR19[297], WikarekS19[395], YangSS19[402], GedikKEK18[132], BenediktSMVH18[49], ShinBBHO18[338], Tesch18[360], ZhangW18[412], BofillCSV17[57], KreterSS17[217], MossigeGSMC17[269], CauwelaertDMS16[76], SchuttS16[333], SzerediS16[351], DejemeppeCS15[92], GayHS15[129], Kameugne15[191], KreterSS15[216], cpaior-GayHS15[130], GrimesIOS14[152], KameugneFSN14[195], HeinzSB13[168], OuelletQ13[289], cpaior-SchuttFS13[329], SchuttCSW12[328], SerraNM12[335], HeinzS11[67], EdisO11[105], KameugneFSN11[194], KelbelH11[198], LahimerLH11[225], TopalogluO11[364], Vilim11[382], BertholdHLMS10[52], CobanH10[82], SchuttW10[334], ZeballosQH10[409], LombardiM09[243], MonetteDH09[266], Vilim09[380], abs-0907-0939[302], cpaior-Vilim09[381], LiessM08[232], MouraSCL08[271], AkkerDH07[370], BeldiceanuP07[45], DavenportKRSH07[88], KhayatLR06[200], Vilim05[379], WolfS05[398], ArtiguesBF04[16], LimRX04[233], PoderBS04[304], Sadykov04[323], OddiPCC03[288], ElkhyariGJ02[107], KamarainenS02[190], ArtiguesR00[17], HeipckeCCS00[171], SakkoutW00[325], Belhadji198[46], Caseau97[75], Zhou97[415], Colombani96[84]
Concepts	producer/consumer	SchuttS16[333], PoderBS04[304], Kumar03[219], SimonisC95[345]	HermenierDL11[174], BeldiceanuC02[42]	GeitzGSSW22[137], KlankeBYE21[203], Simonis07[344], Timpe02[362], Simonis95[343]
Concepts	re-scheduling	BarzegaranŻP20[36], ZhangW18[412], Cappart517[73], Madi-WambaLOBM17[252], GrimesIOS14[152], IfrimOS12[185], LombardiM12[245], RendlPHPR12[318], NovasH10[285], MartinPY01[258], ArtiguesR00[17]	Mehdizadeh-Somarin23[260], KovacsTKSG21[215], AstrandJZ20[22], LimHTB16[234], LimBTBB15[235], CobanH10[82], Acuna-AgostMFG09[4]	PrataAN23[312], EfthymiouY23[106], GurPAE23[157], PerezGSL23[299], TasselGS23[355], abs-2305-19888[170], abs-2306-05747[356], abs-2312-13682[300], ArmstrongGOS22[14], HeinzNVH22[169], PohlAK22[305], KlankeBYE21[203], PandeyS21a[294], ZhangYW21[411], BenediktMH20[48], Lunardi-BLRV20[249], GalleguillosKSB19[124], GeibingerMM19[135], Tom19[363], abs-1911-04766[134], He0GLW18[161], LaborieRSV18[222], NishikawaSTT18a[281], HechingH16[163], BoothNB16[65], NovaraNH16[283], MurphyMB15[274], WangMD15[392], ZhouGL15[416], DerrienPZ14[98], KelarevaTK13[197], TopalogluO11[364], LopesCSM10[246], GarridoAO09[126], MouraSCL08a[270], HoeveGSL07[373], Simonis07[344], Geske05[139], ArtiouchineB05[18], Bartak02a[32], ElkhyariGJ02[107], ElkhyariGJ02a[108], BaptisteP00[29], SakkoutW00[325], GruianK98[155], PapaB98[296], BaptisteP97[28], BeckDF97[37]

	Table 9: Papers by Domain and Keyword					
Domain	Keyword	High	Medium	Low		
Concepts	release-date	WinterMMW22[396], HanenKP21[159], EscobetPQPRA19[110], Tesch18[360], KameugneFSN14[195], LimtanyakulS12[237], SerraNM12[335], KameugneFSN11[194], KovacsB11[210], abs-0907-0939[302], AkkerDH07[370], ArtiouchineB05[18], Hooker05[178], Hooker04[177], Zhou97[415], Colombani96[84], Zhou96[414]	PrataAN23[312], LacknerMMWW23[224], LacknerMMWW21[223], GroleazNS20[154], GeibingerMM19[135], abs-1911-04766[134], HeinzSB13[168], KelbelH11[198], Laborie09[220], Limtanyakul07[236], Simonis07[344], Hooker06[180], WuBB05[401], cp-Hooker05[179], Sadykov04[323]	IsikYA23[186], PovedaAA23[309], YuraszeckMC23[405], PohlAK22[305], GeibingerMM21[136], AntuoriHHEN21[11], HillTV21[175], KovacsTKSG21[215], ZhangYW21[411], GodetLHS20[143], Novas19[284], abs-1902-09244[160], Laborie18a[221], LaborieRSV18[222], NattafAL17[277], DejemeppeCS15[92], NattafAL15[276], KoschB14[208], HeinzKB13[165], HeinzB12[164], BillautHL12[54], ClercqPBJ11[81], GrimesH11[150], KovacsK11[212], Davenport10[87], SchuttW10[334], MonetteDH09[266], KovacsB08[209], BeldiceanuP07[45], ChuX05[79], QuirogaZH05[317], ArtiguesBF04[16], PoderBS04[304], HeipckeCCS00[171], BaptisteP00[29], ArtiguesR00[17], Belhadji198[46], BaptisteP97[28], BeckDF97[37]		

AalianPG23[1], GurPAE23[157], IsikYA23[186], PerezGSL23[299], Armstrum Armin Domain K	Teyword	High	Medium	Low	
BonfiettiZLM16[64], GilesH16[140], FontaineMH16[117], CauwelaertDMS16[76], Madi-WambaB16[251], NovaraNH16[283], SchuttS16[333], SzerediS16[351], Tesch16[359], DejemeppeCS15[92], GoelSHFS15[144], EvenSH15a[112], EvenSH15[111], BurtLPS15[70], GayHS15[129], Kameugne15[191], KreterSS15[216], LetortCB15[230], LombardiBM15[241], NattafAL15[276], PraletLJ15[311], SialaAH15[340], SimoninAHL15[342], VilimLS15[385], WangMD15[392], cpaior-GayHS15[130], GaySS14[131], DejemeppeD14[93], BartoliniBBLM14[35], AlesioNBG14[99], BessiereHMQW14[53], BonfiettiLM14[63], GrimesIOS14[152], KameugneFSN14[195], KoschB14[208], NovasH14[287], HeinzKB13[165], GuSS13[156], HeinzSB13[168], KelarevaTK13[197], LetortCB13[229], OuelletQ13[289], OzturkTHO13[293], SchuttFS13[399], opaior-SchuttFS13[329], BonfiettiLBM12[62], HeinzB12[164], LetortBC12[228], LimtanyakulS12[287], LombardiM12[245], NovasH12[286], SchuttCSW12[328],		•	PrataAN23[312], abs-2402-00459[279], AalianPG23[1], GurPAE23[157], JuvinHHL23[188], KameugneFND23[193], PovedaAA23[309], TardivoDFMP23[354], WangB23[391], YuraszeckMCCR23[406], abs-2305-19888[170], FetgoD22[116], HeinzNVH22[169], GeitzGSSW22[137], CampeauG22[72], AbreuN22[89], BoudreaultsLQ22[67], OuelletQ22[291], OujanaAYB22[292], SubulanC22[347], BenderWS21[47], HillTV21[175], HanenKP21[159], GeibingerMM21[136], HubnerGSV21[184], KovacsTKSG21[215], PandeyS21a[294], VlkHT21[387], ZhangYW21[411], GroleazNS20[154], GodetLHS20[143], AstrandJZ20[22], MengZRZL20[262], Mercier-AubinGQ20[263], QinDCS20[315], SacramentoSP20[322], WangB20[390], GalleguillosKSB19[124], EscobetPQPRA19[110], BehrensLM19[40], GeibingerMM19[135], LiuLH19[238], MalapertN19[254], MurinR19[273], Novas19[284], Tom19[363], WikarekS19[395], VangSS19[402], abs-1901-07914[41], abs-1902-09244[160], abs-1911-04766[134], FahimiOQ18[113], ArbaouiY18[12], BaptisteB18[26], DemirovicS18[95], KameugneFGOQ18[192], Laborie18a[221], LaborieRSV18[222], NishikawaSTT18[280], NishikawaSTT18a[281], OuelletQ18[290], ShinBBHO18[338], Tesch18[360], CappartS17[73], BofillCSV17[57], KreterS17[217], Madi-WambaLOBM17[252], MossigeGSMC17[269], NattafAL17[277], Pralet17[310], YoungFS17[403], BonfiettiZLM16[64], GilesH16[140], FontaineMH16[117], CauwelaertDMS16[76], Madi-WambaB16[251], NovaraNH16[283], SchuttS16[333], SzerediS16[351], Tesch16[359], DejemeppeCS15[92], GoelSHFS15[144], EvenSH15a[112], EvenSH15[111], BurtLPS15[70], GayHS15[29], Kameugne15[191], KreterSS15[216], LetortCB15[230], LombardiBML5[241], NattafAL15[276], PaletLJJ15[311], SialaAH15[340], SimoninAHL15[342], VilimLS15[385], WangMD15[392], cpaior-GayHS15[103], GaySS14[131], DejemeppeD14[93], BartoliniBBLM14[35], AlesioNBG14[99], BessiereHMQW14[53], BonfiettiLM14[63], GrimesIOS14[152], Kameugne15[191], KreterSS15[216], LetortCB13[229], OuelletQ13[289], OzturkTHO13[293], SchuttFS13[330], cpaior-SchuttFS13[329], BonfiettiLBM12[62], HeinzSB13[168], KelarevaTK13[197], LetortCB13[229], OuelletQ13[289], OzturkTH	Bit-Monnot23[55], Caballero23[71], IsikYA23[186], PerezGSL23[299], TasselGS23[355], abs-2306-05747[356], abs-2312-13682[300], MullerMKP22[272], PohlAK22[305], WinterMMW22[396], abs-2211-14492[348], Astrand0F21[20], KlankeBYE21[203], LunardiBLRV20[249], TangB20[352], WallaceY20[389], FrimodigS19[121], ParkUJR19[297], abs-1902-01193[8], GedikKEK18[132], BenediktSMVH18[49], GelainPRVW17[138], GoldwaserS17[146], BoothNB16[65], ZhouGL15[416], DerrienP14[97], DoulabiRP14[103], DerrienP214[98], KovacsK11[212], Davenport10[87], MakMS10[253], MonetteDH09[266], MouraSCL08a[270], WatsonB08[393], Limtanyakul07[236], ArtiouchineB05[18], KovacsEKV05[211], WuBB05[401], cp-Hooker05[179], Wolf03[397], Vilim02[376], Darby-DowmanLMZ97[86], Goltz95[147],	AkramNHRSA ArmstrongGO AbohashimaE6 GOS21[13], BarzegaranZP trandJZ18[21], derM17[204], joLS15[6], Mu CireCH13[80], ThiruvadyBM etteDD07[265] FrankK05[119] MartinPY01[2 bani96[84]

ArmstrongGOS22[14], PopovicCGNC22[307], ZhangJZL22[410], ArmstrongGOS22[14], PopovicCGNC22[307], ZhangJZL22[410], AbohashimaEG21[2], AntuoriHHEN21[11], ArmstrongGOS21[13], FanXG21[115], KoehlerBFFHPSSS21[205], BarzegaranZP20[36], NattafM20[278], ColT19[83], AsrandJZ18[21], ZhangW18[412], Hooker17[181], KletzanlerM17[204], ZarandiKS16[407], GayHLS15[128], MelgareoLS15[6], MurphyMB15[274], Siala15[339], HoundjiSWD14[183], ZireCH13[80], BillautHL12[54], IfrimOS12[185], ZibranR11a[419], FhiruvadyBME09[361], BarlattCG08[31], GarganiR07[125], MontteDD07[265], RossiTHP07[321], LiuJ06[240], FortinZDF05[118], FrankK05[119], ArtiguesBF04[16], Tsang03[368], Timpe02[362], MartinPY01[258], AngelsmarkJ00[10], RodosekW98[320], Colombani96[84]

		Table 9: I	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	scheduling	PrataAN23[312], abs-2402-00459[279], AalianPG23[1], EfthymiouY23[106], AkramNHRSA23[7], Bit-Monnot23[55], GurPAE23[157], Caballero23[71], IsikYA23[186], JuvinHHL23[188], JuvinHL23[189], KameugneFND23[193], KimCMLLP23[202], LacknerMWW23[224], Mehdizadeh-Somarin23[260], MontemanniD23[268], MontemanniD23a[267], PerezGSL23[299], PovedaAA23[309], SquillaciPR23[346], TardivoDFMP23[354], TasselGS23[355], WangB23[391], YuraszeckMC23[405], YuraszeckMCCR23[406], abs-2305-1988[170], abs-2306-05747[356], abs-2312-13682[300], HeinzNVH22[169], ArmstrongGOS22[14], FetgoD22[116], BoudreaultSLQ22[67], CampeauG22[72], GeitzGSSW22[137], AbreuN22[89], LiFJZLL2[231], MullerMKP22[272], OuelletQ22[291], OujanaAYB22[292], PohlAK22[305], PopovicCGNC22[307], SubulanC22[347], WinterMMW22[396], ZhangJZL22[410], abs-2211-14492[348], HanenKP21[159], AbohashimaEG21[2], Astrand0F21[20], AntuoriHHEN21[11], ArmstrongGOS21[13], BenderWS21[47], GeibingerKKMMW21[133], HilTV21[175], FanXC21[115], GeibingerMM21[136], HubnerGSV21[184], KlankeBYE21[203], KoehlerBFFHPSSS21[205], KovacsTKSG21[215], LacknerMMWW21[223], PandeyS21a[294], QinWSLS21[314], VlkHT21[387], ZhangYW21[411], GodetLHS20[143], GroleazNS20[154], BarzegaranZP20[36], BenediktMF20[48], AstrandJZ20[22], LunardiBLRV20[249], MengZRZL20[262], Mercier-AubinGQ20[263], NattafM20[278], QinDCS20[315], SacramentoSP20[322], TangB20[352], WallaceY20[389], WangB20[390], WessenCS20[394], BehrensLM19[40], EscobetPQPRA19[110], FrimodigS19[121], FrohnerTRIP[22], ColT19[83], GalleguillosKSB19[124], GeibingerMM19[135], BogaerdW19[371], LiuLH19[238], Abs-1902-09244[160], abs-1911-04766[134], FahimiOQ18[13], GedikKEK18[132], BenediktSMVH18[49], ArbaouiY18[12], DemirovicS18[95], BaptisteB18[26], He0GLW18[161], AstrandJZ18[21], KameugneFGOQ18[192], Laborie18a[221], LaborieRSV18[22], NishikawaSTT18[280], NishikawaSTT18a[281], NishikawaSTT18[280], NishikawaSTT18a[281], VishikawaSTT18[280], NishikawaSTT18a[281], NishikawaSTT18[280], NishikawaSTT18a[311], Valedla Saledla Poledla Saledla Poledla Saledla Poledla Sal	GayHS15[129], Kameugne15[191], BessiereHMQW14[53], HoundjiSWD14[183], LetortCB13[229], LetortBC12[228], ClercqPBJ11[81], ChapadosJR11[78], Acuna-AgostMFG09[4], Baptiste09[25], abs-0907-0939[302], GomesHS06[148], DilkinaDH05[100], HebrardTW05[162], WuBB05[401], ValleMGT03[369], Vilim03[377], HookerY02[182], Vilim02[376], FrostD98[123], CestaOS98[77], Touraivane95[366]	Hooker17[181], RossiTHP07[321], AbrilSB05[3], VanczaM01[374]

	Table 9: Papers by Domain and Keyword				
Domain	Keyword		High	Medium	Low
Concepts	sequence of setup	dependent	GedikKEK18[132]	IsikYA23[186], GeitzGSSW22[137], MengZRZL20[262], LombardiM12[245], Simonis07[344], ArtiguesBF04[16]	PrataAN23[312], abs-2305-19888[170], HeinzNVH22[169], OujanaAYB22[292], PohlAK22[305], ArmstrongGOS21[13], Mercier-AubinGQ20[263], MalapertN19[254], Novas19[284], FahimiOQ18[113], ArbaouiY18[12], LaborieRSV18[222], Pralet17[310], CauwelaertDMS16[76], NovaraNH16[283], DejemeppeCS15[92], KovacsK11[212], GrimesH10[149], Laborie09[220], AkkerDH07[370], DavenportKRSH07[88], VilimBC05[384], Vilim04[378], Vilim02[376]
Concepts	${\it setup-time}$		PrataAN23[312], IsikYA23[186], LacknerMMWW23[224], abs-2305-19888[170], AbreuN22[89], GeitzGSSW22[137], HeinzNVH22[169], OujanaAYB22[292], PohlAK22[305], WinterMMW22[396], LacknerMMWW21[223], GroleazNS20[154], LunardiBLRV20[249], MengZRZL20[262], Mercier-AubinGQ20[263], NattafM20[278], QinDCS20[315], BogaerdtW19[371], MalapertN19[254], MurinR19[273], Novas19[284], ArbaouiY18[12], GedikKEK18[132], ZhangW18[412], Pralet17[310], CauwelaertDMS16[76], DejemeppeCS15[92], LombardiM12[245], GrimesH10[149], DavenportKRSH07[88], Simonis07[344], ArtiguesBF04[16]	KimCMLLP23[202], LiFJZLL22[231], FanXG21[115], ArmstrongGOS21[13], AstrandJZ20[22], LaborieRSV18[222], NovaraNH16[283], GaySS14[131], KelarevaTK13[197], OzturkTHO13[293], ThiruvadyBME09[361], BeniniBGM06[50], Timpe02[362], Vilim02[376]	EfthymiouY23[106], JuvinHHL23[188], JuvinHL23[189], Mehdizadeh-Somarin23[260], YuraszeckMCCR23[406], MullerMKP22[272], ZhangJZL22[410], abs-2211-14492[348], AbohashimaEG21[2], BenderWS21[47], ZhangYW21[411], GodetLHS20[143], BehrensLM19[40], WikarekS19[395], abs-1902-09244[160], FahimiOQ18[113], GilesH16[140], GoelSHFS15[144], MelgarejoLS15[6], SialaAH15[340], ZhouGL15[416], DejemeppeD14[93], BessiereHMQW14[53], BillautHL12[54], NovasH10[285], Laboric09[220], BarlattCG08[31], KhayatLR06[200], KovacsV06[214], KovacsEKV05[211], VilimBC05[384], Vilim04[378], ArtiguesR00[17], PapaB98[296], ErtlK91[109]
Concepts	stock level		LopesCSM10[246], SimonisC95[345]	RossiTHP07[321], Timpe02[362]	KhemmoudjPB06[201]
Concepts	tardiness		PrataAN23[312], IsikYA23[186], KimCMLLP23[202], LacknerMMWW23[224], AbreuN22[89], OujanaAYB22[292], PohlAK22[305], WinterMMW22[396], abs-2211-14492[348], FanXG21[115], AntuoriHHEN21[11], LacknerMMWW21[223], MengZRZL20[262], Mercier-AubinGQ20[263], TangB20[352], BogaerdtW19[371], ParkUJR19[297], abs-1902-09244[160], LaborieRSV18[222], NovaraNH16[283], ZarandiKS16[407], BartoliniBBLM14[35], LombardiM12[245], GrimesH11[150], KelbelH11[198], KovacsB11[210], Davenport10[87], CobanH10[82], Laborie09[220], MonetteDH09[266], KeriK07[199], Hooker06[180], ZeballosH05[408], cp-Hooker05[179], HentenryckM04[172], DannaP03[85]	abs-2402-00459[279], SubulanC22[347], KovacsTKSG21[215], GroleazNS20[154], GedikKEK18[132], Hooker17[181], NovasH10[285], Hooker05[178], QuirogaZH05[317]	JuvinHL23[189], Mehdizadeh-Somarin23[260], TasselGS23[355], abs-2306-05747[356], LiFJZLL22[231], ZhangJZL22[410], GeibingerMM21[136], HanenKP21[159], HubnerGSV21[184], KoehlerBFFHPSSS21[205], QinWSLS21[314], VlkHT21[387], LunardiBLRV20[249], QinDCS20[315], Novas19[284], Tom19[363], ZhangW18[412], DejemeppeCS15[92], BurtLPS15[70], LimBTBB15[235], MelgarejoLS15[6], PraletLJ15[311], SialaAH15[340], ZhouGL15[416], CireCH13[80], HeinzKB13[165], KelarevaTK13[197], BillautHL12[54], HeinzB12[164], LimtanyakulS12[237], EdisO11[105], KovacsK11[212], ZeballosQH10[409], ThiruvadyBME09[361], KovacsB08[209], BeniniBGM06[50], KovacsV06[214], Hooker04[177], Bartak02a[32]

Domain	Keyword	High	Medium	Low
Concepts	task	PrataAN23[312], abs-2402-00459[279], AkramNHRSA23[7], JuvinHHL23[188], JuvinHL23[189], KameugneFND23[193], PovedaAA23[309], WangB23[391], YuraszeckMCCR23[406], abs-2305-19888[170], CampeauG22[72], BoudreaultSLQ22[67], FetgoD22[116], HeinzNVH22[169], GeitzGSSW22[137], LiFJZLL22[231], OuelletQ22[291], SubulanC22[347], abs-2211-14492[348], Astrand6721[20], ArmstrongGOS21[13], HillTV21[175], HanenKP21[159], KlankeBYE21[203], KoehlerBFFHPSSS21[205], KovacsTKSG21[215], PandeyS21a[294], GodetLHS20[143], Mercier-AubinGQ20[263], QinDCS20[315], WangB20[390], WessenCS20[394], BehrensLM19[40], GeibingerMM19[135], EscobetPQPRA19[110], Novas19[284], Tom19[363], YangSS19[402], abs-1901-07914[41], abs-1911-04766[134], AstrandJZ18[21], BaptisteB18[26], FahimiOQ18[113], KameugneFGOQ18[192], LaborieRSV18[222], NishikawaSTT18[280], NishikawaSTT18a[281], OuelletQ18[290], PourDERB18[308], ShinBBH018[338], KreterSS17[217], Madi-WambaLOBM17[252], MossigeGSMC17[269], NattafAL17[277], GilesH16[140], BoothNB16[65], FontaineMH16[117], Madi-WambaB16[251], NovaraNH16[283], GayHS15[129], EvenSH15[111], GoelSHFS15[144], EvenSH15[112], ButLPS15[70], KreterSS15[216], LetortCB15[230], MurphyMB15[274], NattafAL15[276], PraletLJ15[311], SialaAH15[340], SimoninAHL15[342], VilimLS15[385], ZhouGL15[416], cpaior-GayHS15[130], GrimesIOS14[152], AlesioNBG14[99], BessiereHMQW14[53], KameugneFSN14[195], NovasH14[287], KelarevaTK13[197], LetortCB13[229], OuelletQ13[289], OzturkTHO13[293], SchuttFS13[330], cpaior-SchuttFS13[329], IfrimOS12[185], LetortBC12[228], LombardiM12[245], NovasH14[287], KelarevaTK13[197], LetortCB13[229], OuelletQ13[289], OzturkTHO13[293], SchuttFS13[330], cpaior-SchuttFS13[329], IfrimOS12[185], LetortBC12[228], LombardiM12[245], NovasH14[287], KelarevaTK13[197], LetortCB13[229], OzturkTH013[293], SchuttFS13[390], GrimesIOS14[152], LombardiM12[245], NovasH12[286], SimoninAHL12[341], GrimesH11[150], BeldiceanuCDP11[43], HermenierDL11[174], BonfiettiLBM11[61], HachemiGR11[158], KameugneFSN11[194], KelbelH11[198], KovacsK11[212], Lahim	Bit-Monnot23[55], IsikYA23[186], LacknerMMWW23[224], MontemanniD23[268], MontemanniD23a[267], SquillaciPR23[346], AbreuN22[89], MullerMKP22[272], OujanaAYB22[292], PopovicCGNC22[307], WinterMMW22[396], GeibingerMM21[136], BenderWS21[47], HubnerGSV21[184], BarzegaranZP20[36], WallaceY20[389], WikarekS19[395], DemirovicS18[95], LiuCGM17[239], YoungFS17[403], HechingH16[163], GayHLS15[128], Kameugne15[191], LombardiBM15[241], BartoliniBBLM14[35], BofillEGPSV14[58], BonfiettiLM14[63], Vilim05[379], MartinPY01[258], AngelsmarkJ00[10], PapaB98[296]	EfthymiouY23[106], Mehdizadeh-Somarin23[26] PerezGSL23[299], TardivoDFMP23[354], TasselGS23[35] abs-2306-05747[356], abs-2312-13682[300], Armstron GOS22[14], ZhangJZL22[410], FanXG21[115], Antuc HHEN21[11], LacknerMMWW21[223], ZhangYW21[41] AstrandJZ20[22], BenediktMH20[48], MengZRZL20[26] SacramentoSP20[322], FrimodigS19[121], MalapertN19[25] MurinR19[273], ParkUJR19[297], abs-1902-01193[8], al 1902-09244[160], GedikKEK18[132], Laborie18a[22] Tesch18[360], CappartS17[73], CauwelaertDMS16[76], SzediS16[351], ZarandiKS16[407], DejemeppeCS15[92], MelgajoLS15[6], WangMD15[392], DoulabiRP14[103], CircCH13[8], BitakS11[34], SchausHMCMD11[326], TopalogluO11[36] LopesCSM10[246], MakMS10[253], DoomsH08[102], Litanyakul07[236], LituJ06[240], CarchraeBF05[74], VilimBC05[38] HentenryckM04[172], Sadykov04[323], Vilim04[378], OciPCC03[288], Mason01[259], VerfaillieL01[375], BaptisteP07[28], BeckDF97[37], Puget95[313], Simonis95[34] Touraivane95[366], ErtlK91[109]
		MonetteDH09[266], SchuttFSW09[331], abs-0907-0939[302], cpaior-Vilim09[381], BarlattCG08[31], GarridoOS08[127],	00	
		BarlattCG08[31], GarridoUS08[127], BeldiceanuCP08[44], LiessM08[232], HoeveGSL07[373], BeldiceanuP07[45], MonetteDD07[265], Simonis07[344],	98	

		Table 9: F	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	temporal constraint rea- soning			KeriK07[199], FortinZDF05[118]
Concepts	transportation	ArmstrongGOS22[14], GeitzGSSW22[137], PohlAK22[305], ArmstrongGOS21[13], QinDCS20[315], SacramentoSP20[322], MurinR19[273], PourDERB18[308], GoelSHFS15[144], NovasH14[287], KelarevaTK13[197], NovasH12[286], HachemiGR11[158], LopesCSM10[246], ZeballosH05[408]	KimCMLLP23[202], AbreuN22[89], PopovicCGNC22[307], SubulanC22[347], AbohashimaEG21[2], MengZRZL20[262], LaborieRSV18[222], EvenSH15[11], MelgarejoLS15[6], RendlPHPR12[318], MakMS10[253], MouraSCL08[271], MouraSCL08a[270], LimRX04[233], Mason01[259], ArtiguesR00[17], Wallace96[388]	AalianPG23[1], IsikYA23[186], MontemanniD23a[267], PerezGSL23[299], WangB23[391], abs-2312-13682[300], BoudreaultSLQ22[67], LiFJZLL22[231], ZhangJZL22[410], abs-2211-14492[348], AntuoriHHEN21[11], HubnerGSV21[184], WallaceY20[389], Novas19[284], Tom19[363], abs-1902-09244[160], GedikKEK18[132], He0GLW18[161], ShinBBHO18[338], ZhangW18[412], GoldwaserS17[146], KletzanderM17[204], LiuCGM17[239], GilesH16[140], ZarandiKS16[407], EvenSH15a[112], PesantRR15[301], SimoninAHL15[342], KovacsK11[212], TopalogluO11[364], ZeballosQH10[409], Acuna-AgostMFG09[4], AronssonBK09[15], BarlattCG08[31], LauLN08[226], Simonis07[344], ValleMGT03[369], KamarainenS02[190], MartinPY01[258], SakkoutW00[325], KorbaaYG99[206], RodosekW98[320], Puget95[313], Simonis95[343], SimonisO55[345]
Classification	2BPHFSP	TangB20[352]		
Classification	BPCTOP	KelarevaTK13[197]		
Classification	Bulk Port Cargo Throughput Optimi- sation Problem			KelarevaTK13[197]
Classification	CECSP	NattafAL17[277], NattafAL15[276]		
Classification	CHSP	EfthymiouY23[106], WallaceY20[389]		
Classification	CTW	KoehlerBFFHPSSS21[205]		KameugneFND23[193]
Classification	CuSP	KameugneFND23[193], FetgoD22[116], KameugneFGOQ18[192], Tesch18[360], Tesch16[359], NattafAL15[276], DerrienPZ14[98], KameugneFSN14[195], KameugneFSN11[194], SchuttW10[334]	OuelletQ13[289]	TardivoDFMP23[354], HanenKP21[159], DerrienP14[97]
Classification	EOSP		SquillaciPR23[346], BoudreaultSLQ22[67]	FrankK05[119]
Classification	Earth Observation Scheduling Problem		SquillaciPR23[346]	
Classification	FJS	WangB23[391], YuraszeckMCCR23[406], MullerMKP22[272], LunardiBLRV20[249], MengZRZL20[262], WangB20[390], Novas19[284], MossigeGSMC17[269], HermenierDL11[174]	OujanaAYB22[292], abs-1902-09244[160], ZhangW18[412], SchuttFS13[330]	ZhouGL15[416]
Classification	Fixed Job Scheduling	WangB20[390]	WangB23[391]	
Classification	GCSP	GroleazNS20[154]		
Classification	HFF	ArmstrongGOS22[14], OujanaAYB22[292], ArmstrongGOS21[13], ZhouGL15[416]		
Classification	JSPT		MurinR19[273]	
Classification	JSSP	JuvinHHL23[188], TasselGS23[355], YuraszeckMC23[405], YuraszeckMCCR23[406], abs-2306-05747[356], GeitzGSSW22[137], ColT19[83], Pralet17[310], KelbelH11[198], PapaB98[296]	GalleguillosKSB19[124], LombardiBM15[241], SialaAH15[340], BelhadjiI98[46]	EfthymiouY23[106], Mehdizadeh-Somarin23[260], WikarekS19[395], PraletLJ15[311]
Classification	KRFP	KamarainenS02[190], SakkoutW00[325]		
Classification	LSFRP	KelarevaTK13[197]	IZ 1	
Classification	Liner Shipping Fleet Repositioning Problem		KelarevaTK13[197]	
Classification	MGAP	Darby-DowmanLMZ97[86]		
Classification	Modified Generalized Assignment Problem			

		Table 9:	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Classification	OSP	Bit-Monnot23[55], GurPAE23[157], LacknerMMWW23[224], SquillaciPR23[346], GeibingerKKMMW21[133], LacknerMMWW21[223], abs-1902-01193[8], ShinBBHO18[338], HechingH16[163], GayHLS15[128], WangMD15[392], TopalogluO11[364], Simonis07[344]	BoudreaultSLQ22[67], QinWSLS21[314], DoulabiRP14[103], GrimesHM09[151], MonetteDD07[265], FrankK05[119]	MontemanniD23[268], PerezGSL23[299], PovedaAA23[309], WangB23[391], abs-2312-13682[300], MullerMKP22[272], KoehlerBFFHPSSS21[205], MengZRZL20[262], TangB20[352], LaborieRSV18[222], ZhangW18[412], GoldwaserS17[146], KreterSS17[217], Pralet17[310], YoungFS17[403], SchuttS16[333], KreterSS15[216], PraletLJ15[311], GaySS14[131], SchuttFS13[330], cpaior-SchuttFS13[329], SchuttCSW12[328], SerraNM12[335], SimoninAHL12[341], LopesCSM10[246], WolfS05[398], SchildW00[327], PapaB98[296], Wallace96[388], Puget95[313]
Classification	OSSP	YuraszeckMC23[405], AbreuN22[89]		YuraszeckMCCR23[406]
Classification	Open Shop Scheduling Problem	AbreuN22[89]		PrataAN23[312], Bit-Monnot23[55], YuraszeckMCCR23[406], MengZRZL20[262], SacramentoSP20[322], GrimesH10[149], GrimesHM09[151], MonetteDD07[265], VerfaillieL01[375]
Classification	PJSSP	JuvinHHL23[188]	PapaB98[296]	
Classification	PMSP	WinterMMW22[396], PandeyS21a[294], GodetLHS20[143], MalapertN19[254], GedikKEK18[132]	VlkHT21[387], NattafM20[278]	OujanaAYB22[292]
Classification	PP-MS-MMRCPSP			
Classification	PTC	NattafM20[278], MalapertN19[254], HeinzKB13[165], HeinzB12[164]		
Classification	Pre-emptive Job-Shop scheduling Problem			
Classification	RCPSP	PovedaAA23[309], YuraszeckMCCR23[406], CampeauG22[72], BoudreaultsLQ22[67], FetgoD22[116], SubulanC22[347], GeibingerMM21[136], HillTV21[175], BenderWS21[47], HubnerGSV21[184], GeibingerMM19[135], abs-1902-09244[160], abs-1911-04766[134], KameugnerGOQ18[192], LaborieRSV18[222], BofillCSV17[57], KreterSS17[217], MossigeGSMC17[269], Pralet17[310], YoungFS17[403], SchuttS16[333], SzerediS16[351], KreterSS15[216], VilimLS15[385], HeinzSB13[168], GuSS13[156], cpaior-SchuttFS13[329], LombardiM12[245], SchuttCSW12[328], SchuttFSW11[332], TrojetHL11[367], BertholdHLMS10[52], LombardiM10[244], SchuttFSW09[331], DoomsH08[102], LiessM08[232], ElkhyariGJ02a[108], BaptisteP00[29], BaptisteP97[28]	Caballero23[71], KameugneFND23[193], TardivoDFMP23[354], KovacsTKSG21[215], BaptisteB18[26], FahimiOQ18[113], Tesch18[360], GayHLS15[128], LombardiBM15[241], NattafAL15[276], KameugneFSN14[195], SchuttFS13[330], HeinzS11[167], KameugneFSN11[194], KeriK07[199], KovacsV06[214], ElkhyariGJ02[107], ArtiguesR00[17], HeipckeCCS00[171]	Bit-Monnot23[55], GeitzGSSW22[137], HanenKP21[159], ZhangYW21[411], AstrandJZ20[22], Mercier-AubinGQ20[263], WikarekS19[395], OuelletQ18[290], BonfiettiZLM16[64], Cpaior-GayHS15[130], DerrienPZ14[98], BonfiettiLM14[63], KoschB14[208], LetortCB13[229], OuelletQ13[289], BonfiettiLBM12[62], BonfiettiLBM11[61], GrimesH11[150], LahimerLH11[225], LombardiBMB11[242], Vilim11[382], AkkerDH07[370], PoderBS04[304], HookerY02[182]
Classification	RCPSPDC	GuSS13[156], SchuttCSW12[328]		CampeauG22[72], HubnerGSV21[184], SchuttFS13[330]
Classification	Resource-constrained Project Scheduling Problem with Dis- counted Cashflow			
Classification	SBSFMMAL	OzturkTHO13[293]		
Classification	SCC	KimCMLLP23[202], WolinskiKG04[399]	EvenSH15[111], EvenSH15a[112]	PohlAK22[305], SchausHMCMD11[326]
Classification	SMSDP			
Classification	Steel-making and con- tinuous casting			
Classification	TCSP	BelhadjiI98[46]		
Classification	TMS	PopovicCGNC22[307]		CappartS17[73], SchuttFSW11[332]

Domain	Keyword	High	Medium	Low
Classification	Temporal Constraint Satisfaction Problem	mgn	BelhadjiI98[46]	Low
Classification	parallel machine	PrataAN23[312], IsikYA23[186], abs-2305-19888[170], HeinzNVH22[169], OujanaAYB22[292], WinterMMW22[396], ZhangJZL22[410], PandeyS21a[294], GodetLHS20[143], MengZRZL20[262], NattafM20[278], MalapertN19[254], GedikKEK18[132], ArbaouiY18[12], EdisO11[105]	SacramentoSP20[322], BogaerdtW19[371], Novas19[284], ParkUJR19[297], BenediktSMVH18[49], ZhouGL15[416], KovacsB11[210], AkkerDH07[370]	JuvinHHL23[188], KimCMLLP23[202], LacknerMMWW23[224], Mehdizadeh-Somarin23[260], ArmstrongGOS22[14], HanenKP21[159], FanXG21[115], AbohashimaEG21[2], LacknerMMWW21[223], AstrandJZ20[22], QinDCS20[315], BaptisteB18[26], LaborieRSV18[222], KletzanderM17[204], KreterSS17[217], FontaineMH16[117], BurtLPS15[70], KreterSS15[216], NovasH14[287], LombardiM12[245], LahimerLH11[225], ArtiouchineB05[18], Sadykov04[323]
Classification	psplib	TardivoDFMP23[354], OuelletQ18[290], LetortCB15[230], cpaior-GayHS15[130], DerrienP14[97], KameugneFSN14[195], HeinzSB13[168], cpaior-SchuttFS13[329], SchuttFSW11[332], BertholdHLMS10[52], SchuttFSW09[331]	KameugneFND23[193], BoudreaultSLQ22[67], HillTV21[175], FahimiOQ18[113], BaptisteB18[26], Tesch18[360], SzerediS16[351], Tesch16[359], GayHLS15[128], LombardiBM15[241], VilimLS15[385], BonfiettiLM14[63], LetortCB13[229], LetortBC12[228], HeinzS11[167], Vilim11[382], SchuttW10[334]	LaborieRSV18[222], BofillCSV17[57], Pralet17[310], YoungFS17[403], OuelletQ13[289], LombardiM12[245], KameugneFSN11[194], LiessM08[232], FortinZDF05[118], ElkhyariGJ02a[108]
Classification	single machine	PrataAN23[312], LacknerMMWW23[224], BenediktMH20[48], BogaerdtW19[371], KovacsB11[210], ThiruvadyBME09[361]	HillTV21[175], KoehlerBFFHPSSS21[205], LacknerMMWW21[223], PandeyS21a[294], NattafM20[278], BenediktSMVH18[49], Tesch18[360], KoschB14[208], BillautHL12[54], KovacsK11[212], AkkerDH07[370], Sadykov04[323], OddiPCC03[288], SchildW00[327]	abs-2402-00459[279], IsikYA23[186], Mehdizadeh-Somarin23[260], GeitzGSSW22[137], AbreuN22[89], LiFJZLL22[231], PohlAK22[305], ZhangJZL22[410], abs-2211-14492[348], FanXG21[115], KovacsTKSG21[215], QinWSLS21[314], GodetLHS20[143], TangB20[352], MalapertN19[254], ParkUJR19[297], Tom19[363], GedikKEK18[132], ArbaouiY18[12], AstrandJZ18[21], MossigeGSMC17[269], ZarandiKS16[407], DejemeppeCS15[92], BurtLPS15[70], MelgarejoLS15[6], HoundjiSWD14[183], NovasH14[287], HeinzKB13[165], HeinzSB13[168], GuSS13[156], HeinzB12[164], KovacsB08[209], KovacsV04[213], BeldiceanuC02[42], HeipckeCCS00[171], SakkoutW00[325], Darby-DowmanLMZ97[86], BeckDF97[37]
Constraints	alldifferent	JuvinHHL23[188], KoehlerBFFHPSSS21[205], Simonis07[344]	GodetLHS20[143], BessiereHMQW14[53], KelarevaTK13[197]	WangB23[391], AstrandJZ20[22], WangB20[390], FahimiOQ18[113], MelgarejoLS15[6], AlesioNBG14[99], ClercqPBJ11[81], HermenierDL11[174], HachemiGR11[158], TrojetHL11[367], LopesCSM10[246]
Constraints	alternative constraint	LaborieRSV18[222]	abs-2305-19888[170], MurinR19[273]	LacknerMMWW23[224], HeinzNVH22[169], WinterMMW22[396], ZhangJZL22[410], ArmstrongGOS21[13], HillTV21[175], HubnerGSV21[184], PandeyS21a[294], VlkHT21[387], MengZRZL20[262], SacramentoSP20[322], Escobet-PQPRA19[110], GeibingerMM19[135], GalleguillosKSB19[124], MalapertN19[254], abs-1911-04766[134], ArbaouiY18[12], Laborie18a[221], NishikawaSTT18[280], NishikawaSTT18a[281], CappartS17[73], NovaraNH16[283], PraletLJ15[311], BartoliniB-BLM14[35], SchuttFS13[330], HeinzB12[164], Laborie09[220]
Constraints	${ m always In}$	PopovicCGNC22[307], SerraNM12[335]	AalianPG23[1], TangB20[352], MalapertN19[254], LaborieRSV18[222], GoelSHFS15[144]	CampeauG22[72], KreterSS17[217]
Constraints	bin-packing	TangB20[352], LetortCB15[230], LetortCB13[229], HeinzSSW12[166], LetortBC12[228], SchausHMCMD11[326]	FrimodigS19[121], BaptisteB18[26], GarganiR07[125], SakkoutW00[325], SchildW00[327]	abs-2402-00459[279], AkramNHRSA23[7], Lackner-MMWW23[224], abs-2211-14492[348], ArmstrongGOS21[13], GodetLHS20[143], Madi-WambaLOBM17[252], DoulabiRP14[103], KoschB14[208], LimtanyakulS12[237], EdisO11[105], HermenierDL11[174], BeldiceanuCDP11[43], HentenryckM08[173], KovacsB08[209], DavenportKRSH07[88], Simonis07[344]

		Table 9:	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Constraints	circuit	MontemanniD23a[267], KlankeBYE21[203], Mercier-AubinGQ20[263], GruianK98[155], Wallace96[388]	WessenCS20[394], KrogtLPHJ07[372], KuchcinskiW03[218], DincbasSH90[101]	PrataAN23[312], IsikYA23[186], MontemanniD23[268], MullerMKP22[272], ArmstrongGOS21[13], KoehlerBFFH-PSS21[205], GroleazNS20[154], WallaceY20[389], EscobetPQPRA19[110], Hooker17[181], HechingH16[163], MelgarejoLS15[6], MurphyMB15[274], HoundjiSWD14[183], CireCH13[80], cpaior-SchuttFS13[329], LombardiM12[245], SchuttFSW11[332], CobanH10[82], Hooker06[180], QuSN06[316], Hooker05[178], cp-Hooker05[179], Hooker04[177], MartinPY01[258], KorbaaYG99[206], RodosekW98[320], Simonis95[343]

		Table 9: F	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Constraints	cumulative	AalianPG23[1], IsikYA23[186], KameugneFND23[193], LacknerMMWW23[224], PovedaAA23[309], TardivoDFMP23[354], BoudreaultSLQ22[67], FetgoD22[116], OuelletQ22[291], PohlAK22[305], ZhangJZL22[410], HanenKP21[159], KovacsTKSG21[215], LacknerMMWW21[223], GroleazNS20[154], GodetLHS20[143], Mercier-AubinGQ20[263], SacramentoSP20[322], WallaceY20[389], GeibingerMM19[135], MalapertN19[254], Novas19[284], YangSS19[402], abs-1911-04766[134], FahimiOQ18[113], BaptisteB18[26], KameugneFGOQ18[192], LaborieRSV18[222], OuelletQ18[290], Tesch18[360], KreterSS17[217], Madi-WambaLOBM17[252], MossigeGSMC17[269], NattafAL17[277], Pralet17[310], YoungFS17[403], NovaraNH16[283], SchuttS16[333], SzerediS16[351], Tesch16[359], EvenSH15[111], GoelSHFS15[144], EvenSH15a[112], GayHS15[129], Kameugne15[191], KreterSS15[216], LetortCB15[230], MurphyMB15[274], NattafAL15[276], SimoninAHL15[342], VilimLS15[385], cpaior-GayHS15[130], DerrienPZ14[98], DerrienP14[97], DejemeppeD14[93], GaySS14[131], KameugneFSN14[195], HeinzKB13[165], HeinzSB13[168], LetortCB13[229], OuelletQ13[289], SchuttFS13[330], cpaior-SchuttFS13[329], BonfiettiLBM12[62], HeinzB12[164], LetortBC12[228], LombardiM12[245], SchuttCSW12[328], SerraNM12[335], ClercqPBJ11[81], BeldiceanuCDP11[43], HeinzS11[167], KameugneFSN11[194], KelbelH11[198], SchuttFSW11[332], TrojetHL11[367], Vilim11[382], BertholdHLMS10[52], LombardiM10[244], SchuttW10[334], SchuttFSW11[331], Vilim09[380], abs-0907-0939[302], cpaior-Vilim09[381], BeldiceanuCP08[44], KovacsB08[209], BeldiceanuP07[45], Simonis07[344], Hooker06[180], KhemmoudjPB06[201], Hooker05[178], Geske05[139], WolfS05[398], cp-Hooker05[179], Hooker04[177], HentenryckM04[172], PoderBS04[304], BeldiceanuCO2[42], HookerY02[182], ArtiguesR00[17], BaptisteP00[29], PapaB98[296], BaptisteP97[28], Goltz95[147], SimonisC95[345]	PrataAN23[312], abs-2402-00459[279], EfthymiouY23[106], PerezGSL23[299], abs-2312-13682[300], CampeauG22[72], GeitzGSSW22[137], AbreuN22[89], HillTV21[175], HubnerGSV21[184], KlankeBYE21[203], NattafM20[278], GalleguillosKSB19[124], GedikKEK18[132], BoothNB16[65], BonfiettiZLM16[64], LimHTB16[234], BurtLPS15[70], GayHLS15[128], GuSS13[156], LimtanyakulS12[237], BartakS11[34], KovacsB11[210], GrimesH10[149], AronssonBK09[15], AkkerDH07[370], Limtanyakul07[236], BeniniBGM06[50], KovacsV06[214], ChuX05[79], VilimBC05[384], KovacsV04[213], VilimBC04[383], Bartak02a[32], Caseau97[75]	Bit-Monnot23[55], GurPAE23[157], JuvinHHL23[188], TasselGS23[355], YuraszeckMCCR23[406], abs-2305-19888[170], abs-2306-05747[356], HeinzNVH22[169], Armstrong-GOS22[14], PopovicGNC22[307], SubulanC22[347], abs-2211-14492[348], ArmstrongGOS21[13], GeibingerMM21[136], KoehlerBFFHPSSS21[205], PandeyS21a[294], FrimodigS19[121], WikarekS19[395], abs-1902-09244[160], DemirovicS18[95], AstrandJZ18[21], ArbaouiY18[12], Laborie18a[221], ZhangW18[412], GoldwaserS17[146], BofillCSV17[57], CappartS17[73], CauwelaertDMS16[76], GilesH16[140], Madi-WambaB16[251], DejemeppeCS15[92], PesantRR15[301], SialaAH15[340], WangMD15[392], ZhouGL15[416], BonfiettiLM14[63], BartoliniBBLM14[35], KoschB14[208], CireCH13[80], OzturkTHO13[293], SimoninAHL12[341], BonfiettiLBM11[61], HermenierDL11[174], GrimesH11[150], ChapadosJR11[78], EdisO11[105], LombardiBMB11[242], Laborie09[220], MonerteDH09[266], ThiruvadyBME09[361], LiessM08[232], MouraSCL08a[270], RossiTHPO7[321], ArtiouchineB05[18], Vilim05[379], Vilim04[378], Vilim03[377], Wolf03[397], ElkhyariGJ02a[108], ElkhyariGJ02[107], Bartak02[33], Timpe02[362], Vilim02[376], HeipckeCCS00[171], GruianK98[155], BeckDF97[37], Zhou97[415], Simonis95[343]

		Table 9: F	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Constraints	cycle	AalianPG23[1], AbohashimaEG21[2], Astrand0F21[20], AntuoriHHEN21[11], AstrandJZ20[22], WallaceY20[389], ParkUJR19[297], AstrandJZ18[21], BessiereHMQW14[53], LombardiBMB11[242], SunLYL10[349], RossiTHP07[321], WolinskiKG04[399], KuchcinskiW03[218], Kumar03[219], ArtiguesR00[17], SchildW00[327], KorbaaYG99[206], GruianK98[155], RodosekW98[320], ErtlK91[109]	EfthymiouY23[106], CampeauG22[72], HillTV21[175], HubnerGSV21[184], KoehlerBFFHPSSS21[205], GroleazNS20[154], MossigeGSMC17[269], BurtLPS15[70], PraletLJ15[311], SimoninAHL15[342], BonfiettiLBM12[62], SimoninAHL12[341], HachemiGR11[158], BonfiettiLBM11[61], KovacsB11[210], Vilim11[382], KovacsB08[209], Simonis07[344], BeniniBGM06[50], KhemmoudjPB06[201], LiuJ06[240], OddiPCC03[288], Wallace96[388]	AkramNHRSA23[7], Bit-Monnot23[55], AbreuN22[89], ArmstrongGOS21[13], FanXG21[115], Mercier-AubinGQ20[263], QinDCS20[315], TangB20[352], EscobetPQPRA19[110], Novas19[284], abs-1902-09244[160], LaborieRSV18[222], KreterSS17[217], Pralet17[310], BonfiettiZLM16[64], DejemeppeCS15[92], LetortCB15[230], MurphyMB15[274], GaySS14[131], OzturkTHO13[293], BillautHL12[54], HeinzB12[164], LombardiM12[245], NovasH12[286], SerraNM12[335], ChapadosJR11[78], HermenierDL11[174], KovacsK11[212], TrojetHL11[367], GrimesH10[149], LopesCSM10[246], MakMS10[253], MonetteDH09[266], Vilim09[380], cpaior-Vilim09[381], MouraSCL08[271], KeriK07[199], FrankK05[119], VilimBC05[384], HentenryckM04[172], Muscettola02[275], Timpe02[362], VanczaM01[374], VerfaillieL01[375], BensanaLV99[51], BeckDF97[37], Simonis95[343]
Constraints	diffn	ArmstrongGOS21[13], Simonis07[344]	BeldiceanuCDP11[43]	KreterSS17[217], KreterSS15[216], TrojetHL11[367], Timpe02[362], GruianK98[155], Simonis95[343], SimonisC95[345]
Constraints	disjunctive	Bit-Monnot23[55], JuvinHHL23[188], KoehlerBFFHPSSS21[205], GodetLHS20[143], FahimiOQ18[113], LaborieRSV18[222], MossigeGSMC17[269], NattafAL17[277], Pralet17[310], FontaineMH16[117], GoelSHFS15[144], MelgarejoLS15[6], SialaAH15[340], cpaior-GayHS15[130], OzturkTHO13[293], SchuttFS13[330], cpaior-SchuttFS13[329], LombardiM12[245], BeldiceanuCDP11[43], SchuttFSW11[332], GrimesH10[149], LopesCSM10[246], SchuttW10[334], GrimesHM09[151], BeldiceanuCP08[44], HentenryckM04[172], ArtiguesBF04[16], Wolf03[397], ElkhyariGJ02a[108], BaptisteP00[29], SakkoutW00[325], Belhadji198[46], PapaB98[296], RodosekW98[320], BaptisteP97[28], Zhou97[415], Zhou96[414], DincbasSH90[101]	BoudreaultSLQ22[67], GeibingerMM21[136], Astrand0F21[20], AstrandJZ20[22], SacramentoSP20[322], YangSS19[402], DemirovicS18[95], KameugneFGOQ18[192], GayHS15[129], EvenSH15a[112], EvenSH15[111], SimoninAHL15[342], VilimLS15[385], GaySS14[131], KameugneFSN14[195], GrimesH11[150], HeinzS11[167], KelbelH11[198], LiessM08[232], MouraSCL08[271], MouraSCL08a[270], MonetteDD07[265], ArtiouchineB05[18], ArtiguesR00[17], SchildW00[327], Darby-DowmanLMZ97[86]	abs-2402-00459[279], EfthymiouY23[106], KameugneFND23[193], LacknerMMWW23[224], PovedaAA23[309], TardivoDFMP23[354], TasselGS23[355], abs-2306-05747[356], MullerMKP22[272], OuelletQ22[291], OujanaAYB22[292], abs-2211-14492[348], KlankeBYE21[203], ZhangYW21[411], Mercier-AubinGQ20[263], WallaceY20[389], ColT19[83], WikarekS19[395], abs-1911-04766[134], AstrandJZ18[21], OuelletQ18[290], GoldwaserS17[146], YoungFS17[403], GilesH16[140], BoothNB16[65], BonfiettiZLM16[64], Cauwelaert-DMS16[76], NovaraNH16[283], Tesch16[359], DejemeppeCS15[92], GayHLS15[128], MurphyMB15[274], Siala15[339], GrimesIOS14[152], KoschB14[208], HeinzSB13[168], LetortCB13[229], OuelletQ13[289], IfrimOS12[185], LimtanyakulS12[237], SimoninAHL12[341], HermenierDL11[174], KameugneFSN11[194], KovacsB11[210], LahimerLH11[225], TrojetHL11[367], Vilim11[382], BertholdHLMS10[52], CobanH10[82], LombardiM10[244], GarridoAO09[126], Laborie09[220], MonetteDH09[266], SchuttFSW09[331], KovacsB08[209], WatsonB08[393], HoeveGSL07[373], DavenportKRSH07[88], BeldiceanuP07[45], Simonis07[344], Hooker06[180], LiuJ06[240], ChuX05[79], Hooker04[177], KovacsV04[213], Sadykov04[323], Vilim04[378], Vilim05[379], VilimBC05[384], cp-Hooker05[179], Hooker04[177], KovacsV04[213], Sadykov04[323], Vilim04[378], Vilim02[376], VanczaM01[374], HeipckeCCS00[171], Colombani96[84], Wallace96[388], Goltz95[147], Puget95[313]
Constraints	${\rm endBeforeStart}$	SubulanC22[347], QinDCS20[315]	IsikYA23[186], PandeyS21a[294], LunardiBLRV20[249], MengZRZL20[262], LaborieRSV18[222], NovaraNH16[283], Laborie09[220]	AalianPG23[1], JuvinHHL23[188], JuvinHL23[189], Lackner-MWW23[224], YuraszeckMCCR23[406], CampeauG22[72], ZhangJZL22[410], HubnerGSV21[184], LacknerMWW21[223], ZhangYW21[411], BenediktMH20[48], SacramentoSP20[322], TangB20[352], GeibingerMM19[135], MurinR19[273], Novas19[284], ParkUJR19[297], abs-1902-09244[160], abs-1911-04766[134], NishikawaSTT18[280], NishikawaSTT18a[281]
Constraints	geost	BeldiceanuCDP11[43]	LetortBC12[228]	BeldiceanuCP08[44]

		Table 9: F	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Constraints	noOverlap	IsikYA23[186], JuvinHHL23[188], abs-2305-19888[170], HeinzNVH22[169], PopovicCGNC22[307], VlkHT21[387], LunardiBLRV20[249], QinDCS20[315], GedikKEK18[132], MelgarejoLS15[6]	KimCMLLP23[202], LacknerMMWW23[224], TasselGS23[355], abs-2306-05747[356], AbreuN22[89], PohlAK22[305], BenderWS21[47], KlankeBYE21[203], BenediktMH20[48], MengZRZL20[262], SacramentoSP20[322], EscobetPQPRA19[110], MalapertN19[254], MurinR19[273], Novas19[284], abs-1911-04766[134], ArbaouiY18[12], LaborieRSV18[222], ZhangW18[412], BoothNB16[65], NovaraNH16[283], GoelSHFS15[144], PraletLJ15[311], EdisO11[105]	AalianPG23[1], JuvinHL23[189], SquillaciPR23[346], YuraszeckMC23[405], ArmstrongGOS22[14], CampeauG22[72], OujanaAYB22[292], WinterMMW22[396], ZhangJZL22[410], LacknerMMWW21[223], GroleazNS20[154], NattafM20[278], GeibingerMM19[135], BogaerdtW19[371], ColT19[83], ParkUJR19[297], BenediktSMVH18[49], CappartS17[73], HechingH16[163], VilimLS15[385], WangMD15[392], Laborie09[220]
Constraints Constraints	regular expression span constraint		FrimodigS19[121] CappartS17[73], SchuttFS13[330],	OujanaAYB22[292], TangB20[352], LaborieRSV18[222], Simoni-
Constraints	span constraint		Darby-DowmanLMZ97[86]	nAHL15[342], SimoninAHL12[341], SchuttFSW11[332]
Constraints	table constraint	PapaB98[296]	. ,	PerezGSL23[299], abs-2312-13682[300], ArmstrongGOS21[13], GayHS15[129], MelgarejoLS15[6], PesantRR15[301], LimtanyakulS12[237], HermenierDL11[174], LopesCSM10[246], MouraSCL08[271], ElkhyariGJ02[107]
ProgLanguages	С	KoehlerBFFHPSSS21[205]		HubnerGSV21[184], BogaerdtW19[371], LaborieRSV18[222], Laborie09[220], GarridoOS08[127]
ProgLanguages	C++			JuvinHHL23[188], TardivoDFMP23[354], PopovicCGNC22[307], AntuoriHHEN21[11], QinWSLS21[314], AstrandJZ20[22], Mercier-AubinGQ20[263], abs-1902-01193[8], ArbaouiY18[12], LaborieRSV18[222], NattafAL17[277], BoothNB16[65], Tesch16[359], NattafAL15[276], KovacsB11[210], KovacsK11[212], LahimerLH11[225], LombardiBMB11[242], LopesCSM10[246], ThiruvadyBME09[361], LiessM08[232], MouraSCL08[271], MouraSCL08a[270], WatsonB08[393], GarganiR07[125], DavenportKRSH07[88], KeriK07[199], KhemmoudjPB06[201], Vilim05[379], ArtiguesBF04[16], Timpe02[362], BaptisteP00[29], PapaB98[296], BaptisteP97[28]
ProgLanguages	Java		KuchcinskiW03[218]	KameugneFND23[193], TasselGS23[355], abs-2306-05747[356], FetgoD22[116], MullerMKP22[272], OuelletQ22[291], Antuori-HHEN21[11], FanXG21[115], ArmstrongGOS21[13], BarzegaranZP20[36], SacramentoSP20[322], TangB20[352], FrohnerTR19[122], ColT19[83], GeibingerMM19[135], Tom19[363], abs-1911-04766[134], KameugneFGOQ18[192], LaborieRSV18[222], OuelletQ18[290], CauwelaertDMS16[76], Madi-WambaB16[251], EvenSH15a[112], LetortCB15[230], MurphyMB15[274], cpaior-GayHS15[130], DerrienP14[97], KoschB14[208], LetortCB13[229], LetortBC12[228], RendlPHPR12[318], ClercqPBJ11[81], ZibranR11[418], SchuttW10[334], GarridoAO09[126], GrimesHM09[151], abs-0907-0939[302], GarridoOS08[127], WolinskiKG04[399], OddiPCC03[288], Wolf03[397]
ProgLanguages ProgLanguages	Julia Lisp			Wallace96[388]
ProgLanguages	Prolog	ArmstrongGOS21[13], FalaschiGMP97[114], Zhou97[415], Wallace96[388], Simonis95[343], Touraivane95[366], DincbasSH90[101]	Madi-WambaLOBM17[252], MossigeGSMC17[269], MartinPY01[258], RodosekW98[320], Zhou96[414], SimonisC95[345]	ArmstrongGOS22[14], PopovicCGNC22[307], YangSS19[402], abs-1902-01193[8], LetortCB15[230], LetortCB13[229], LetortBC12[228], BeldiceanuCDP11[43], TrojetHL11[367], AronssonBK09[15], BeldiceanuCP08[44], KrogtLPHJ07[372], Simonis07[344], QuSN06[316], Geske05[139], PoderBS04[304], Bartak02[33], BeldiceanuC02[42], KorbaaYG99[206], Darby-DowmanLMZ97[86], Goltz95[147], ErtlK91[109]

	Table 9: Papers by Domain and Keyword				
Domain	Keyword	High	Medium	Low	
ProgLanguages	Python	KoehlerBFFHPSSS21[205]	AbreuN22[89], abs-2211-14492[348], LaborieRSV18[222]	AkramNHRSA23[7], EfthymiouY23[106], KimCMLLP23[202], Mehdizadeh-Somarin23[260], MontemanniD23[268], MontemanniD23a[267], PovedaAA23[309], SquillaciPR23[346], CampeauG22[72], FetgoD22[116], MullerMKP22[272], PohlAK22[305], FanXG21[115], BenderWS21[47], AbohashimaEG21[2], HanenKP21[159], KlankeBYE21[203], Lunardi-BLRV20[249], Mercier-AubinGQ20[263], GalleguillosKSB19[124], FrimodigS19[121], FrohnerTR19[122], BehrensLM19[40], abs-1901-07914[41], abs-1902-01193[8], He0GLW18[161], GoldwaserS17[146], LiuCGM17[239]	
CPSystems	СНІР	TrojetHL11[367], ZeballosQH10[409], Simonis07[344], GruianK98[155], Wallace96[388], Goltz95[147], Simonis95[343], SimonisC95[345], DincbasSH90[101]	ArmstrongGOS21[13], YangSS19[402], LaborieRSV18[222], BeniniBGM06[50], Geske05[139], PoderBS04[304], WolinskiKG04[399], Timpe02[362], RodosekW98[320], Zhou97[415]	PrataAN23[312], KameugneFND23[193], MontemanniD23[268], TardivoDFMP23[354], BoudreaultsLQ22[67], FetgoD22[116], AbreuN22[89], OuelletQ22[291], Popovic-CGNC22[307], KlankeBYE21[203], QinWSLS21[314], GroleazNS20[154], GodetLHS20[143], FrimodigS19[121], abs-1902-01193[8], BaptisteB18[26], KameugneFGOQ18[192], OuelletQ18[290], PourDERB18[308], KreterSS17[217], MossigeGSMC17[269], Pralet17[310], BonfettiZLM16[64], FontaineMH16[117], HechingH16[163], Madi-WambaB16[251], GayHS15[129], KreterSS15[216], LetortCB15[230], MurphyMB15[274], SimoninAHL15[342], ZhouGL15[416], cpaior-GayHS15[130], DerrienPZ14[98], DerrienP14[97], Grime-sIOS14[152], KameugneFSN14[195], HeinzSB13[168], OuelletQ13[289], OzturkTHO13[293], HeinzB12[164], LetortBC12[228], SchuttCSW12[328], SimoninAHL12[341], HeinzS11[167], BeldiceanuCDP11[43], ClercqPBJ11[81], SchuttFSW11[332], SchuttFSW09[331], abs-0907-0939[302], BeldiceanuCP08[44], DavenportKRSH07[88], KhemmoudjPB06[201], WolfS05[398], KuchcinskiW03[218], BeldiceanuCO2[42], BaptisteP00[29], SakkoutW00[325], KorbaaYG99[206], PapaB98[296], BaptisteP07[28], Colombani96[84]	
CPSystems	CPO	Bit-Monnot23[55], JuvinHHL23[188], LacknerMMWW23[224], WinterMMWW22[396], ArmstrongGOS21[13], LacknerMMWW21[223], GroleazNS20[154], NattafM20[278], SacramentoSP20[322], GeibingerMM19[135], ColT19[83], MalapertN19[254], LaborieRSV18[222], KreterSS17[217], GoelSHFS15[144], PraletLJ15[311], Laborie09[220]	AalianPG23[1], abs-1911-04766[134]	JuvinHL23[189], PovedaAA23[309], OujanaAYB22[292], GeibingerMM21[136], TangB20[352], Laborie18a[221], Pralet17[310], VilimLS15[385], GarridoAO09[126], Vilim09[380], GarridoOS08[127]	
CPSystems	Choco Solver	TasselGS23[355], abs-2306-05747[356], LetortCB15[230], LetortCB13[229], OuelletQ13[289], LetortBC12[228], GarridoAO09[126], GrimesHM09[151], abs-0907-0939[302], GarridoOS08[127]	KameugneFND23[193], FetgoD22[116], MullerMKP22[272], AntuoriHHEN21[11], LiuLH19[238], FahimiOQ18[113], KameugneFGOQ18[192], LaborieRSV18[222], GayHS15[129], DerrienP14[97], DerrienPZ14[98], KoschB14[208], ClercqPBJ11[81], HermenierDL11[174]	OuelletQ22[291], GodetLHS20[143], YangSS19[402], OuelletQ18[290], Madi-WambaB16[251], EvenSH15[111], EvenSH15a[112], MurphyMB15[274], BessiereHMQW14[53], RossiTHP07[321]	
CPSystems	Chuffed	LacknerMMWW23[224], PovedaAA23[309], BoudreaultSLQ22[67], MullerMKP22[272], GeibingerMM21[136], ArmstrongGOS21[13], KoehlerBFFHPSSS21[205], LacknerMMWW21[223], GodetLHS20[143], WallaceY20[389], abs-1911-04766[134], KreterSS17[217], YoungFS17[403], SzerediS16[351], KreterSS15[216]		SchuttS16[333]	

		Table 9: F	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
CPSystems CPSystems	Claire Cplex	BaptisteP00[29] MullerMKP22[272], SubulanC22[347], WinterMMW22[396], GeibingerKKMMW21[133], HubnerGSV21[184], KoehlerBFFHPSS21[205], PandeyS21a[294], LunardiBLRV20[249], MengZRZL20[262], QinDCS20[315], SacramentoSP20[322], GeibingerMM19[135], MurinR19[273], abs-1911-04766[134], LaborieRSV18[222], NishikawaSTT18[280], NishikawaSTT18a[281], KreterSS17[217], NovaraNH16[283], KoschB14[208], HeinzSB13[168], CireCH13[80], Mason01[259], Darby-DowmanLMZ97[86]	BaptisteP97[28] IsikYA23[186], LacknerMMWW23[224], Mehdizadeh-Somarin23[260], CampeauG22[72], ArmstrongGOS21[13], KovacsTKSG21[215], LacknerMWW21[223], QinWSLS21[314], NattafM20[278], WallaceY20[389], MalapertN19[254], Novas19[284], abs-1902-09244[160], HechingH16[163], BofillGSV15[59], NattafAL15[276], PraletLJ15[311], VilimLS15[385], BofillEGPSV14[58], GrimesIOS14[152], HeinzKB13[165], BillautHL12[54], HeinzB12[164], LimtanyakulS12[237], SerraNM12[335], GrimesH11[150], EdisO11[105], KelbelH11[198], AronssonBK09[15], Hooker05[178], Hooker04[177], DannaP03[85], SakkoutW00[325], RodosekW98[320]	HanenKP21[159], PapaB98[296] GurPAE23[157], AalianPG23[1], JuvinHL23[189], PovedaAA23[309], SquillaciPR23[346], YuraszeckMCCR23[406], AbreuN22[89], PohlAK22[305], PopovicCGNC22[307], abs- 2211-14492[348], GeibingerMM21[136], FanXG21[115], KlankeBYE21[203], VlkHT21[387], ZhangYW21[411], TangB20[352], FrimodigS19[121], EscobetPQPRA19[110], BogaerdtW19[371], GedikKEK18[132], ArbaouiY18[12], PourDERB18[308], ZhangW18[412], NattafAL17[277], Pralet17[310], BoothNB16[65], GilesH16[140], Szeredis16[351], GoelSHFS15[144], BurtLPS15[70], KreterSS15[216], Melgare- joLS15[6], WangMD15[392], DoulabiRP14[103], AlesioNBG14[99], KelarevaTK13[197], OzturkTHO13[293], HeinzSSW12[166], HeinzS11[167], HachemiGR11[158], KovacsK11[212], TopalogluO11[364], ZibranR11[418], ZibranR11a[419], CobanH10[82], Davenport10[87], BertholdHLMS10[52], Sun- LYL10[349], ZeballosQH10[409], AkkerDH07[370], Dav- enportKRSH07[88], HoeveGSL07[373], BeniniBGM06[50], Hooker06[180], KhayatLR06[200], cp-Hooker05[179], Timpe02[362], VerfaillieL01[375], BensanaLV99[51]
CPSystems	ECLiPSe	RodosekW98[320]	SchuttFSW11[332], KamarainenS02[190], Darby-DowmanLMZ97[86], Wallace96[388]	FanXG21[115], WikarekS19[395], ZeballosQH10[409], SchuttFSW09[331], BeniniBGM06[50], ChuX05[79], QuirogaZH05[317], MartinPY01[258]
CPSystems	Gecode	TardivoDFMP23[354], AstrandJZ20[22], SzerediS16[351], GayHS15[129], ZhouGL15[416], KameugneFSN14[195]	MullerMKP22[272], GeibingerKKMMW21[133], Astrand0F21[20], AntuoriHHEN21[11], GeibingerMM19[135], FrohnerTR19[122], abs-1911-04766[134], LaborieRSV18[222], BurtLPS15[70], BofillEGPSV14[58], KameugneFSN11[194], KovacsK11[212], ThiruvadyBME09[361]	ArmstrongGOS21[13], MengZRZL20[262], WallaceY20[389], WessenCS20[394], FrimodigS19[121], YangSS19[402], AstrandJZ18[21], GoldwaserS17[146], PesantRR15[301], MonetteDD07[265]
CPSystems	Gurobi	LacknerMMWW23[224], WangB23[391], WinterMMW22[396], GeibingerKKMMW21[133], KoehlerBFFHPSSS21[205], KovacsTKSG21[215], LacknerMMWW21[223], WallaceY20[389], WangB20[390], FrohnerTR19[122]	VlkHT21 (387), GoldwaserS17[146], FontaineMH16[117]	KimCMLLP23[202], MontemanniD23[268], abs-2305-19888[170], HeinzNVH22[169], PohlAK22[305], AbohashimaEG21[2], FanXG21[115], HubnerGSV21[184], KlankeBYE21[203], BenedikH10[48], MengZRZL20[262], DemirovicS18[95], He0GLW18[161], BenediktSMVH18[49], BurtLPS15[70], PesantRR15[301]
CPSystems	Ilog Scheduler	GrimesH11[150], ZeballosQH10[409]	LaborieRSV18[222], HeinzB12[164], LimtanyakulS12[237], NovasH12[286], GrimesHM09[151], WatsonB08[393], ZeballosH05[408]	Laborie18a[221], SchuttS16[333], NovasH14[287], HachemiGR11[158], KovacsB11[210], LahimerLH11[225], SchuttFSW11[332], LopesCSM10[246], NovasH10[285], cpaior-Vilim09[381], KovacsB08[209], MouraSCL08[271], MouraSCL08a[270], HoeveGSL07[373], Simonis07[344], Hooker06[180], KovacsV06[214], ArtiouchineB05[18], Hooker05[178], QuirogaZH05[317], WuBB05[401], cp-Hooker05[179], Hooker04[177], ArtiguesBF04[16], KovacsV04[213], DannaP03[85], Bartak02a[32], BaptisteP00[29], Zhou97[415]

		Table 9: P	apers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
CPSystems	Ilog Solver		GrimesH11[150], ZeballosQH10[409]	abs-1902-01193[8], LaborieRSV18[222], ZarandiKS16[407], PesantRR15[301], NovasH14[287], OzturkTHO13[293], BonfiettiLBM12[62], HeinzB12[164], NovasH12[286], BonfiettiLBM11[61], KelbelH11[198], KovacsB11[210], KovacsK11[212], TopalogluO11[364], LombardiM10[244], LopesCSM10[246], LombardiM09[243], KovacsB08[209], MouraSCL08[271], MouraSCL08a[270], BeniniBGM06[50], GomesHS06[148], QuirogaZH05[317], ZeballosH05[408], ArtiguesBF04[16], DannaP03[85], ValleMGT03[369], MartinPY01[258], SchildW00[327], BensanaLV99[51], KorbaaYG99[206], PapaB98[296], Wallace96[388]
CPSystems	MiniZinc	LacknerMMWW23[224], TardivoDFMP23[354], BoudreaultSLQ22[67], MullerMKP22[272], ArmstrongGOS21[13], KoehlerBFFHPSS21[205], LacknerMMWW21[223], Mercier-AubinGQ20[263], WallaceY20[389], FrohnerTR19[122], GeibingerMM19[135], ColT19[83], abs-1911-04766[134], LiuCGM17[239], YoungFS17[403], SzerediS16[351], BofillEGPSV14[58], KelarevaTK13[197]	PovedaAA23[309], KreterSS17[217], KreterSS15[216]	Bit-Monnot23[55], OuelletQ22[291], GeibingerKKMMW21[133], FrimodigS19[121], BehrensLM19[40], abs-1901-07914[41], DemirovicS18[95], FontaineMH16[117], SchuttS16[333], BurtLPS15[70], HeinzSB13[168], SchuttFS13[330]
CPSystems	Mistral	JuvinHHL23[188], GrimesHM09[151]	Bit-Monnot23[55], BillautHL12[54]	SialaAH15[340]
CPSystems	OPL	LacknerMMWW23[224], MullerMKP22[272], KoehlerBFFHPSSS21[205], LacknerMMWW21[223], PandeyS21a[294], QinDCS20[315], EscobetPQPRA19[110], Novas19[284], LaborieRSV18[222], NovaraNH16[283], AlesioNBG14[99], NovasH12[286], HachemiGR11[158], ZeballosQH10[409], Laborie09[220], KhayatLR06[200]	SubulanC22[347], Mercier-AubinGQ20[263], MurinR19[273], Laborie18a[221], EvenSH15a[112], LimBTBB15[235], WangMD15[392], NovasH14[287], OzturkTHO13[293], HeinzB12[164], SerraNM12[335], EdisO11[105], KelbelH11[198], TopalogluO11[364], ZibranR11a[419], NovasH10[285], GarganiR07[125], KrogtLPHJ07[372], Simonis07[344], Hooker06[180], QuirogaZH05[317], ZeballosH05[408], cp-Hooker05[179], VerfaillieL01[375], RodosekW98[320]	abs-2402-00459[279], EfthymiouY23[106], GurPAE23[157], IsikYA23[186], MontemanniD23[268], PerezGSL23[299], YuraszeckMCCR23[406], abs-2312-13682[300], Armstrong-GOS22[14], GeitzGSSW22[137], BoudreaultSLQ22[67], LiFJZLL22[231], OujanaAYB22[292], HubnerGSV21[184], QinWSLS21[314], VlkHT21[387], MengZRZL20[262], WallaceY20[389], BogaerdtW19[371], Tom19[363], YangSS19[402], abs-1902-01193[8], abs-1902-09244[160], ZhangW18[412], CappartS17[73], LiuCGM17[239], HechingH16[163], LimHTB16[234], SchuttS16[333], Tesch16[359], EvenSH15[111], GoelSHFS15[144], HeinzKB13[165], CireCH13[80], BartakS11[34], GrimesH11[150], ChapadosJR11[78], ZibranR11[418], CobanH10[82], LopesCSM10[246], SunLYL10[349], GarridoAO09[126], BeldiceanuCP08[44], Limtanyakul07[236], RossiTHP07[321], Hooker05[178], DilkinaDH05[100], Hooker04[177], ElkhyariGJ02a[108], Mason01[259], GruianK98[155], Wallace96[388], Puget95[313], DincbasSH90[101]
CPSystems	OR-Tools	abs-2402-00459[279], LacknerMMWW23[224], MullerMKP22[272], abs-2211-14492[348], KoehlerBFFHPSS21[205], KovacsTKSG21[215], LacknerMMWW21[223], ColT19[83], GayHS15[129]	EfthymiouY23[106], BoudreaultSLQ22[67], GeibingerKKMMW21[133], BarzegaranZP20[36], LiuCGM17[239]	Bit-Monnot23[55], AkramNHRSA23[7], KimCMLLP23[202], MontemanniD23[268], MontemanniD23a[267], Klanke-BYE21[203], GroleazNS20[154], MengZRZL20[262], GalleguillosKSB19[124], BehrensLM19[40], YangSS19[402], abs-1901-07914[41], PourDERB18[308], BonfiettiZLM16[64], ZhouGL15[416], LombardiM12[245]

	Table 9: Papers by Domain and Keyword					
Domain	Keyword	High	Medium	Low		
CPSystems	OZ	PrataAN23[312], IsikYA23[186], WikarekS19[395], TopalogluO11[364], NovasH10[285], VanczaM01[374], SchildW00[327]	GeitzGSSW22[137], AbreuN22[89], PohlAK22[305], SubulanC22[347], IdW00[327] FanXG21[115], AstrandJZ20[22], GodetLHS20[143], WessenCS20[394], BehrensLM19[40], LiuLH19[238], Novas19[284], abs-1901-07914[41], Hooker17[181], GrimesH11[150], EdisO11[105], ZeballosQH10[409], LiessM08[232], BeniniBGM06[50], MaraveliasG04[257] BeniniBGM06[50], MaraveliasG04[257] BeniniBGM06[50], MaraveliasG04[257] GrimesH11[150], EdisO11[105], GrimesH11[150], EdisO11[105], GrimesH10[149], KelarevaTK13[197], Cpaior-SchuttFS13[329], LimtanyakulS bardiM12[245], NovasH12[286], RendlPl menierDL11[174], SchuttFSW11[332], GrimesH10[149], LopesCSM10[246], SchuttFSW09[331], MouraSCL08[271], QuirogaZH05[317], LimRX04[233], Beldic tak02[33], ElkhyariGJ02a[108], Mason01[255]			
CPSystems	SICStus	ArmstrongGOS21[13], LetortCB15[230], LetortCB13[229], LetortBC12[228]	MossigeGSMC17[269], SchuttFSW11[332], QuSN06[316]	ArmstrongGOS22[14], PopovicCGNC22[307], YangSS19[402], Madi-WambaLOBM17[252], BeldiceanuCDP11[43], TrojetHL11[367], SchuttFSW09[331], BeldiceanuCP08[44], Geske05[139], Bartak02[33], BeldiceanuC02[42]		
CPSystems	Z3	KoehlerBFFHPSSS21[205]	VlkHT21[387], WikarekS19[395], Zhou97[415]	ZhangW18[412], BofillCSV17[57], BertholdHLMS10[52], Zhou96[414]		
ApplicationAreas	COVID		GeibingerKKMMW21[133]	GurPAE23[157], Mehdizadeh-Somarin23[260], OujanaAYB22[292]		
ApplicationAreas	HVAC	LimHTB16[234], LimBTBB15[235], GrimesIOS14[152]				
ApplicationAreas	agriculture			AkramNHRSA23[7], Astrand0F21[20], BenderWS21[47], Qin-WSLS21[314]		
ApplicationAreas	aircraft	PohlAK22[305], WangB20[390], LombardiM12[245], FrankK05[119], ArtiouchineB05[18]	WangB23[391], Simonis07[344], SakkoutW00[325]	PrataAN23[312], PovedaAA23[309], abs-1902-09244[160], LaborieRSV18[222], Laborie09[220], KovacsB08[209], KrogtLPHJ07[372], MartinPY01[258], GruianK98[155], Darby-DowmanLMZ97[86], Wallace96[388], Simonis95[343], SimonisC95[345]		
ApplicationAreas	${ m automotive}$		LimtanyakulS12[237], SunLYL10[349], BarlattCG08[31], SchildW00[327]	PovedaAA23[309], AntuoriHHEN21[11], HubnerGSV21[184], KoehlerBFFHPSSS21[205], VlkHT21[387], BarzegaranZP20[36], GeibingerMM19[135], abs-1911-04766[134], BonfiettiZLM16[64], AlesioNBG14[99], BeniniBGM06[50], KovacsV06[214], Wallace96[388]		
ApplicationAreas	cable tree	KoehlerBFFHPSSS21[205]				
ApplicationAreas	car manufacturing		AntuoriHHEN21[11]			
ApplicationAreas	container terminal	QinDCS20[315], SacramentoSP20[322]	LaborieRSV18[222]	PerezGSL23[299], abs-2312-13682[300], WallaceY20[389], CauwelaertDMS16[76], DejemeppeCS15[92], NovasH12[286], LimRX04[233]		
ApplicationAreas	crew-scheduling	PourDERB18[308]	Mason01[259], Touraivane95[366]	WangB23[391], HeinzNVH22[169], HachemiGR11[158], BeldiceanuC02[42]		
ApplicationAreas	dairies	T. I. DODD I tolatol	D . ANGOIGAGI	Bartak02a[32], Bartak02[33]		
ApplicationAreas	dairy	EscobetPQPRA19[110]	PrataAN23[312]	Collandillas/CD10[194] M. P. W L. I. ODM17[070]		
ApplicationAreas	datacenter	HermenierDL11[174]		GalleguillosKSB19[124], Madi-WambaLOBM17[252], If-rimOS12[185], LetortBC12[228]		
ApplicationAreas	datacentre					
ApplicationAreas ApplicationAreas	day-ahead market deep space					
ApplicationAreas	deep space					

Domain	Keyword	High	Medium	Low
ApplicationAreas	earth observation	SquillaciPR23[346], VerfaillieL01[375]	BensanaLV99[51]	PraletLJ15[311], SimoninAHL15[342], KelarevaTK13[197], Odd-iPCC03[288]
ApplicationAreas	earth orbit		D. J. J.YYYaafaaal	SquillaciPR23[346]
ApplicationAreas	electroplating	G : TOGA (famol IC: OGA ofa om)	RodosekW98[320]	EfthymiouY23[106], WallaceY20[389], NovasH12[286]
ApplicationAreas	energy-price	GrimesIOS14[152], IfrimOS12[185]		PrataAN23[312], EscobetPQPRA19[110], BenediktSMVH18[49], He0GLW18[161], LimHTB16[234]
ApplicationAreas	farming	II 1 (CD44[4F0]		WinterMMW22[396], Astrand0F21[20]
ApplicationAreas	forestry	HachemiGR11[158]	M. Haningel D. C. att DM44[64]	Astrand0F21[20]
ApplicationAreas	hoist	EfthymiouY23[106], WallaceY20[389], RodosekW98[320]	NovasH12[286], BonfiettiLBM11[61]	AstrandJZ18[21], BonfiettiLBM12[62], LombardiBMB11[242], KorbaaYG99[206], PapaB98[296]
ApplicationAreas	medical	ShinBBHO18[338], WangMD15[392], TopalogluO11[364]	HechingH16[163], DejemeppeD14[93], RendlPHPR12[318]	AkramNHRSA23[7], IsikYA23[186], AbreuN22[89], GeibingerKKMW21[133], FrimodigS19[121], Novas19[284], abs-1902-01193[8], GedikKEK18[132], BoothNB16[65], DoulabiRP14[103], Simonis07[344]
ApplicationAreas	nurse	GurPAE23[157], abs-1902-01193[8], ShinBBHO18[338], WangMD15[392], RendlPHPR12[318], Simonis07[344], Mason01[259]	OuelletQ22[291], GeibingerKKMMW21[133], GeibingerMM21[136], FrohnerTR19[122]	PerezGŚL23[299], abs-2312-13682[300], FrimodigS19[121], GedikKEK18[132], NishikawaSTT18a[281], DoulabiRP14[103], TopalogluO11[364]
ApplicationAreas	offshore	N14301101 [200]	SubulanC22[347]	BoudreaultSLQ22[67]
ApplicationAreas	oven scheduling	LacknerMMWW23[224], LacknerMMWW21[223]	54541411022[011]	Dodarouano D 422[01]
Application Areas	patient	GurPAE23[157], FrimodigS19[121], ShinBBHO18[338], HechingH16[163], WangMD15[392], DejemeppeD14[93], RendlPHPR12[318], TopalogluO11[364]	GeibingerKKMMW21[133]	MurinR19[273], DoulabiRP14[103], Simonis07[344]
ApplicationAreas	perfect-square	BeldiceanuCDP11[43], BeldiceanuCP08[44]		
ApplicationAreas	physician	GeibingerKKMMW21[133], ShinBBHO18[338]		GurPAE23[157], FrimodigS19[121], WangMD15[392], TopalogluO11[364]
${\bf Application Areas}$	pipeline	LopesCSM10[246], MouraSCL08[271], MouraSCL08a[270], ErtlK91[109]	BeniniBGM06[50], WolinskiKG04[399]	EfthymiouY23[106], PopovicCGNC22[307], HanenKP21[159], LaborieRSV18[222], NishikawaSTT18[280], NishikawaSTT18a[281], GilesH16[140], GoelSHFS15[144], SimoninAHL15[342], NovasH10[285], BarlattCG08[31], KuchcinskiW03[218], Wolf03[397], GruianK98[155], Darby-DowmanLMZ97[86], SimonisC95[345]
ApplicationAreas	radiation therapy	FrimodigS19[121]		
ApplicationAreas	railway	PourDERB18[308], CappartS17[73], AronssonBK09[15], Acuna-AgostMFG09[4], Geske05[139], MartinPY01[258]	LaborieRSV18[222], Mason01[259]	BogaerdtW19[371], ZhouGL15[416], AbrilSB05[3], Wallace96[388]
ApplicationAreas	real-time pricing		He0GLW18[161], GrimesIOS14[152]	LimHTB16[234]
ApplicationAreas	rectangle-packing	YangSS19[402]		MossigeGSMC17[269], VilimLS15[385], BeldiceanuCDP11[43], SchuttW10[334], BeldiceanuCP08[44]
ApplicationAreas	robot	IsikYA23[186], LiFJZLL22[231], ArmstrongGOS21[13], KoehlerBFFHPSSS21[205], WessenCS20[394], BehrensLM19[40], MurinR19[273], abs-1901-07914[41], LaborieRSV18[222], MossigeGSMC17[269], BoothNB16[65], NovasH14[287], NovasH12[286], ValleMGT03[369]	PrataAN23[312], Mehdizadeh-Somarin23[260], OujanaAYB22[292], Astrand0F21[20], WallaceY20[389], WikarekS19[395], NishikawaSTT18[280], NishikawaSTT18a[281], VanczaM01[374]	MontemaniiD23[268], abs-2305-19888[170], GeitzGSSW22[137], HeinzNVH22[169], MullerMKP22[272], VlkHT21[387], ZhangYW21[411], BarzegaranZP20[36], AstrandJZ20[22], BenediktMH20[48], MengZRZL20[262], Novas19[284], AstrandJZ18[21], ZhangW18[412], ZarandiKS16[407], SimoninAHL15[342], BonfiettiLBM12[62], LimtanyakulS12[237], BonfiettiLBM11[61], TrojetHL11[367], ZeballosQH10[409], Limtanyakul07[236], QuirogaZH05[317], ZeballosH05[408], KorbaaYG99[206], CestaOS98[77], BeckDF97[37], Caseau97[75], Wallace96[388]
ApplicationAreas	satellite	SquillaciPR23[346], GodetLHS20[143], LaborieRSV18[222], PraletLJ15[311], KelarevaTK13[197], VerfaillieL01[375], BensanaLV99[51]	Laborie09[220], FrankK05[119]	EfthymiouY23[106], Astrand0F21[20], Pralet17[310], Simoni- nAHL15[342], BessiereHMQW14[53], HeinzSB13[168], Simoni- nAHL12[341], OddiPCC03[288]

		Table 9:	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
ApplicationAreas	semiconductor	MalapertN19[254], NovasH12[286]	QinWSLS21[314], Davenport10[87], KrogtLPHJ07[372]	LacknerMMWW23[224], MullerMKP22[272], ZhangJZL22[410], abs-2211-14492[348], FanXG21[115], LacknerMMWW21[223], PandeyS21a[294], MengZRZL20[262], NattafM20[278], TangB20[352], Novas19[284], LaborieRSV18[222], KoschB14[208]
ApplicationAreas	ship building			
ApplicationAreas	steel cable			AalianPG23[1]
ApplicationAreas	steel mill	GaySS14[131], HeinzSSW12[166], SchausHMCMD11[326], HentenryckM08[173], GarganiR07[125]		PerezGSL23[299], abs-2312-13682[300]
ApplicationAreas	super-computer	BartoliniBBLM14[35]		GalleguillosKSB19[124]
ApplicationAreas	torpedo	GoldwaserS17[146], KletzanderM17[204]		
ApplicationAreas	vaccine			
Application Areas	yard crane		QinDCS20[315]	WallaceY20[389]
Industries	aerospace industry			SchildW00[327]
Industries	agricultural industry	WinterMMW22[396]		
Industries	automotive industry		LimtanyakulS12[237]	AntuoriHHEN21[11], BonfiettiZLM16[64], SchildW00[327], Wallace96[388]
Industries	chemical industry		${\rm Timpe 02}[362]$	LaborieRSV18[222], GilesH16[140], LombardiM12[245], PoderBS04[304]
Industries	chemical processing in- dustry			GilesH16[140]
Industries	control system industry			BonfiettiZLM16[64]
Industries	electricity industry			PopovicCGNC22[307]
Industries	electronics industry			LacknerMMWW23[224], LacknerMMWW21[223]
Industries	food industry			OujanaAYB22[292], GroleazNS20[154], EscobetPQPRA19[110], HachemiGR11[158], Simonis95[343], SimonisC95[345]
Industries	food-processing industry			KlankeBYE21[203], abs-1902-09244[160]
Industries	manufacturing industry			PrataAN23[312], LacknerMMWW23[224], Winter-MMW22[396], FanXG21[115], LacknerMMWW21[223], Mercier-AubinGQ20[263], TangB20[352], EscobetPQPRA19[110], GedikKEK18[132]
Industries	mineral industry			Astrand0F21[20], AstrandJZ20[22]
Industries	mining industry		AalianPG23[1]	abs-2402-00459[279], CampeauG22[72], Astrand0F21[20], AstrandJZ20[22]
Industries	oil industry			LopesCSM10[246]
Industries	packaging industry			ArmstrongGOS21[13]
Industries	petro-chemical industry			LaborieRSV18[222], GilesH16[140]
Industries	pharmaceutical industry			YuraszeckMCCR23[406], GeibingerKKMMW21[133], NovaraNH16[283]
Industries	potash industry			AstrandoF21[20], AstrandJZ20[22], AstrandJZ18[21]
Industries	power industry			FrostD98[123]
Industries	process industry		Timpe02[362]	HeinzSSW12[166], Wallace96[388]
Industries	retail industry			ChapadosJR11[78]
Industries	services industry			DoomsH08[102]
Industries	ship repair industry			BoudreaultSLQ22[67]
Industries	steel industry		DavenportKRSH07[88]	IsikYA23[186], KimCMLLP23[202], LacknerMMWW23[224], OujanaAYB22[292], LacknerMMWW21[223], abs-1902-09244[160], GoldwaserS17[146], KletzanderM17[204], HeinzSSW12[166], SchausHMCMD11[326], GrimesH10[149], GarganiR07[125]
Industries	steel making industry			
Industries	textile industry	Mercier-AubinGQ20[263]		BessiereHMQW14[53]
Industries	tourism industry			LiuCGM17[239]

		Table 9: I	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Benchmarks	benchmark	Bit-Monnot23[55], IsikYA23[186], JuvinHHL23[188], LacknerMMWW23[224], PovedaAA23[309], TardivoDFMP23[354], TasselGS23[355], YuraszeckMCCR23[406], abs-2306-05747[356], AbreuN22[89], BoudreaultSLQ22[67], LiFJZLL22[231], MullerMKP22[272], OuelletQ22[291], WinterMMW22[396], ZhangJZL22[410], abs-2211-14492[348], GeibingerMM21[136], FanXG21[115], KoehlerBFFHPSSS21[205], LacknerMMWW21[223], PandeyS21a[294], ZhangYW21[411], GodetLHS20[143], WallaceY20[389], FrimodigS19[121], ColT19[83], LiuLH19[238], abs-1902-09244[160], abs-1911-04766[134], DemirovicS18[95], GedikKEK18[132], Laborie18a[221], LaborieRSV18[222], OuelletQ18[290], KreterSS17[217], BurtLPS15[70], KreterSS15[216], MelgarejoLS15[6], VilimLS15[385], BonfiettiLM14[63], HeinzSB13[168], cpaior-SchuttFS13[329], GrimesH11[150], SchuttFSW11[332], SchuttFSW09[331], WatsonB08[393], KuchcinskiW03[218], Wolf03[397], HeipckeCCS00[171], SakkoutW00[325], BensanaLV99[51], BeckDF97[37]	abs-2402-00459[279], AkramNHRSA23[7], KameugneFND23[193], MontemanniD23a[267], YuraszeckMC23[405], abs-2305-19888[170], HeinzNVH22[169], FetgoD22[116], OujanaAYB22[292], KovacsTKSG21[215], GroleazNS20[154], BenediktMH20[48], MengZRZL20[262], SacramentoSP20[322], GeibingerMM19[135], Novas19[284], FahimiOQ18[113], Arbaouiy18[12], NishikawaSTT18[280], BofillCSV17[57], MossigeGSMC17[269], BonfiettiZLM16[64], NovaraNH16[283], SchuttS16[333], SzerediS16[351], DejemeppeCS15[92], LetortCB15[230], LombardiBM15[241], SialaAH15[340], cpaior-GayHS15[130], KameugneFSN14[195], KoschB14[208], LetortCB13[229], OuelletQ13[289], LimtanyakulS12[237], SchuttCSW12[328], BeldiceanuCDP11[43], ClercqPBJ11[81], KameugneFSN11[194], KelbelH11[198], GrimesH10[149], GrimesHM09[151], MonetteDH09[266], BeldiceanuCP08[44], MonetteDD07[265], HentenryckM04[172], KovacsV04[213], VilimBC04[383], DannaP03[85], OddiPCC03[288], Bartak02a[32], GruianK98[155], Zhou97[415]	PrataAN23[312], EfthymiouY23[106], KimCMLLP23[202], MontemanniD23[268], SquillaciPR23[346], Armstrong-GOS22[14], PohlAK22[305], SubulanC22[347], Armstrong-GOS21[13], Astrand0F21[20], HubnerGSV21[184], Klanke-BYE21[203], VlkHT21[387], AstrandJZ20[22], Lunardi-BLRV20[249], NattafM20[278], QinDCS20[315], FrohnerTR19[122], BogaerdtW19[371], MalapertN19[254], MurinR19[273], abs-1901-07914[41], KameugneFGOQ18[192], NishikawaSTT18a[281], PourDERB18[308], ZhangW18[412], GelainPRVW17[138], Hooker17[181], Pralet17[310], YoungFS17[403], FontaineMH16[117], Cauwelaert-DMS16[76], Madi-WambaB16[251], GayHLS15[128], LimBTBB15[235], Siala15[339], DerrienPZ14[98], AlesioNBG14[99], BessiereHMQW14[53], NovasH14[287], GuSS13[156], SchuttFS13[330], BonfiettiLBM12[62], LetortBC12[228], LombardiM12[245], RendlPHPR12[318], SerraNM12[335], HeinzS11[167], BonfiettiLBM11[61], KovacSB11[210], LahimerLH11[225], LombardiBMB11[242], SchausHMCMD11[326], Vilim11[382], LombardiBM10[244], LopesCSM10[246], SchuttW10[334], ZeballosQH10[409], GarridoAO09[126], Laborie09[220], KovacsB08[209], LauLN08[226], LiessM08[232], MouraSCL08a[270], HoeveGSL07[373], KhayatLR06[200], KovacsV06[214], FrankK05[119], Vilim05[379], VilimBC05[384], WuBB05[401], ArtiguesBF04[16], Vilim04[378], BeldiceanuC02[42], ElkhyariGJ02a[108], KamarainenS02[190], BaptisteP00[29], PapaB98[296], RodosekW98[320], Darby-DowmanLMZ97[86], Caseau97[75], BaptisteP97[28], Goltz95[147], Puget95[313], ErtK91[109]
Benchmarks	bitbucket		TardivoDFMP23[354]	He0GLW18[161], CappartS17[73], CauwelaertDMS16[76], GayHS15[129], DejemeppeCS15[92], GayHLS15[128], cpaior- GayHS15[130], DejemeppeD14[93], HoundjiSWD14[183]
Benchmarks	generated instance	IsikYA23[186], abs-1911-04766[134]	PerezGSL23[299], abs-2312-13682[300], GodetLHS20[143], Madi-WambaB16[251], KelbelH11[198], SchausHMCMD11[326]	abs-2402-00459[279], EfthymiouY23[106], abs-2305-19888[170], BoudreaultSLQ22[67], HeinzNVH22[169], abs-2211-14492[348], GeibingerMM21[136], HanenKP21[159], AbohashimaEG21[2], Astrand0F21[20], BenediktMH20[48], LunardiBLRV20[249], GeibingerMM19[135], MalapertN19[254], YangSS19[402], BenediktSMVH18[49], PourDERB18[308], GoldwaserS17[146], MossigeGSMC17[269], BonfiettiZLM16[64], DejemeppeCS15[92], LetortCB15[230], NattafAL15[276], HoundjiSWD14[183], LimtanyakulS12[237], BonfiettiLBM11[61], KovacsV06[214], ArtiouchineB05[18], LimRX04[233]
Benchmarks	github	KoehlerBFFHPSSS21[205]	PovedaAA23[309], TardivoDFMP23[354], BoudreaultSLQ22[67], BenediktMH20[48], GodetLHS20[143], LunardiBLRV20[249]	abs-2402-00459[279], Bit-Monnot23[55], Juvin-HHL23[188], SquillaciPR23[346], TasselGS23[355], YuraszeckMC23[405], YuraszeckMCCR23[406], abs-2306-05747[356], GeitzGSSW22[137], MullerMKP22[272], OuelletQ22[291], GeibingerMM21[136], AbohashimaEG21[2], KovacsTKSG21[215], VlkHT21[387], WangB20[390], ColT19[83], BehrensLM19[40], MurinR19[273], abs-1901-07914[41], abs-1911-04766[134], BenediktSMVH18[49], ShinBBHO18[338], GoldwaserS17[146], LiuCGM17[239], YoungFS17[403], BonfiettiZLM16[64], SialaAH15[340]
Benchmarks	gitlab		HeinzNVH22[169]	abs-2305-19888[170], BoudreaultSLQ22[67], AntuoriHHEN21[11]

		Table	9: Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Benchmarks	http://	IsikYA23[186], YuraszeckMC23[405], HeinzNVH22[169], He0GLW18[161], BaptisteB18[26], LiuCGM17[239], VilimLS15[385], BofillEGPSV14[58], GrimesIOS14[152], SchuttFSW11[332], GarridoAO09[126], Mason01[259]	KameugneFND23[193], FetgoD22[116], WessenCS20[394], GedikKEK18[132], DemirovicS18[95], LaborieRSV18[222], PourDERB18[308], ShinBBHO18[338], BofillCSV17[57], LimHTB16[234], NovaraNH16[283], BofillGSV15[59], BurtLPS15[70], LetortCB15[230], LimBTBB15[235], MurphyMB15[274], SialaAH15[340], WangMD15[392], BartoliniBBLM14[35], KameugneFSN14[195], KelarevaTK13[197], LetortCB13[229], cpaior-SchuttFS13[329], IfrimOS12[185], LetortBC12[228], SerraNM12[335], ZibranR11a[419], Vilim05[379], VanczaM01[374], HeipckeCCS00[171], BensanaLV99[51], Darby-DowmanLMZ97[86]	PrataAN23[312], JuvinHHL23[188], LacknerMMWW23[224], MontemanniD23a[267], WangB23[391], abs-2305-19888[170], GeitzGSSW22[137], AbreuN22[89], PohlAK22[305], AntuoriHHEN21[11], GeibingerKKMMW21[133], HubnerGSV21[184], KoehlerBFFHPSS21[205], KovacsTKSG21[215], VlkHT21[387], BarzegaranZP20[36], AstrandJZ20[22], Mercier-AubinGQ20[263], NattafM20[278], WallaceY20[389], WangB20[390], GeibingerMM19[135], GalleguillosKSB19[124], BogaerdtW19[371], EscobetPQPRA19[110], BehrensLM19[40], ColT19[83], MalapertN19[254], abs-1901-07914[41], abs-1911-04766[134], KameugneFGOQ18[192], Laborie18a[221], ZhangW18[412], GelainPRVW17[138], GoldwaserS17[146], KletzanderM17[204], KreterSS17[217], MossigeGSMC17[269], NattafAL17[277], Pralet17[310], YoungFS17[403], CauwelaerDMS16[76], Madi-WambaB16[251], SchuttS16[333], SzerediS16[351], Tesch16[359], DejemeppeCS15[92], GayHS15[129], EvenSH15a[112], GoelSHFS15[144], EvenSH15[111], Kameugne15[191], KreterSS15[216], MelgarejoLS15[6], NattafAL15[276], PesantRR15[301], Siala15[339], ZhouGL15[416], DerrienPZ14[98], AlesioNBG14[99], BessiereHMQW14[53], BonfiettiLM14[63], HoundjiSWD14[183], NovasH14[287], HeinzSB13[168], OuelletQ13[289], Ozturk-THO13[293], SchuttFS13[330], HeinzSSW12[166], BonfiettiLBM12[62], LimtanyakulS12[237], RendlPHPR12[318], SchuttCSW12[328], BeldiceanuCDP11[43], HeinzS11[167], GrimesH11[150], BartakS11[34], ClercqPBJ11[81], BonfiettiLBM11[61], HermenierDL11[174], KameugneFSN11[194], KelbelH11[198], KovacsK11[212], LahimerLH11[255], SchausHMCMD11[326], TopalogluO11[364], TrojetHL11[367], Vilim11[382], BertholdHLMS10[52], LopesCSM10[246], NovasH10[285], SunLYL10[349], ZeballosQH10[409], AronsonBK09[15], Laborie09[220], SchuttFSW09[331], ThiruvadyBME09[361], Vilim09[380], abs-0907-0939[302], GarridOOS08[127], LiessM08[232], GarganiR07[125], HoeveGSL07[373], KeriK07[199], Hooker06[180], KhayatLR06[200], DilkinaDH05[100], Geske05[139], AbrilSB05[3], ArtiouchineB05[18], FortinZDF05[118], VilimBC05[384], ZeballosH05[408], KovacsV04[213], PoderBS04[304], Vilim04[378], VilimBC04[383

	Table 9: Papers by Domain and Keyword					
Domain	Keyword	High	Medium	Low		
Benchmarks	https://	EfthymiouY23[106], GurPAE23[157], IsikYA23[186], MontemanniD23[268], PovedaAA23[309], TardivoDFMP23[354], abs-2305-19888[170], BoudreaultSLQ22[67], HeinzNVH22[169], ArmstrongGOS22[14], GeitzGSSW22[137], CampeauG22[72], MullerMKP22[272], OuelletQ22[291], HanenKP21[159], AstrandoF21[20], BenderWS21[47], HillTV21[175], GeibingerKKMMW21[133], HubnerGSV21[184], KlankeBYE21[203], KoehlerBFFHPSSS21[205], BenediktMH20[48], GroleazNS20[154], LunardiBLRV20[249], Mercier-AubinGQ20[263], NattafM20[278], WessenCS20[394], ColT19[83], GeibingerMM19[135], GalleguillosKSB19[124], BogaerdtW19[371], MalapertN19[254], MurinR19[273], YangSS19[402], DemirovicS18[95], KameugneFGOQ18[192], Laborie18a[221], OuelletQ18[290], Tesch18[360]	abs-2402-00459[279], AkramNHRSA23[7], KameugneFND23[193], KimCMLLP23[202], LacknerMMWW23[224], Mehdizadeh-Somarin23[260], MontemanniD23a[267], SquillaciPR23[346], YuraszeckMC23[405], YuraszeckMCCR23[406], FetgoD22[116], AbreuN22[89], PohlAK22[305], SubulanC22[347], WinterMMW22[396], KovacsTKSG21[215], SacramentoSP20[322], TangB20[352], WallaceY20[389], FrohnerTR19[122], FrimodigS19[121], LiuLH19[238], abs-1911-04766[134], AstrandJZ18[21], GedikKEK18[132], He0GLW18[161], ArbaouiY18[12], BenediktSMVH18[49], LiuCGM17[239], YoungFS17[403]	PrataAN23[312], Bit-Monnot23[55], Caballero23[71], JuvinHHL23[188], JuvinHL23[189], TasselGS23[355], abs-2306-05747[356], OujanaAYB22[292], PopovicCGNC22[307], abs-2211-14492[348], AbohashimaEG21[2], FanXG21[115], ArmstrongGOS21[13], AntuoriHHEN21[11], Lackner-MMWW21[223], PandeyS21a[294], QinWSLS21[314], VlkHT21[387], ZhangYW21[411], AstrandJZ20[22], GodetLHS20[143], BarzegaranZP20[36], MengZRZL20[262], QinDCS20[315], WangB20[390], EscobetPQPRA19[110], BehrensLM19[40], Novas19[284], ParkUJR19[297], abs-1901-07914[41], abs-1902-09244[160], FahimiOQ18[113], Labori-eRSV18[222], NishikawaSTT18[280], NishikawaSTT18a[281], ShinBBHO18[338], GoldwaserS17[146], CappartS17[73], FontaineMH16[117], CauwelaertDMS16[76], BonfiettiZLM16[64], Madi-WambaB16[251], DejemeppeCS15[92], GayHS15[129], WangMD15[392], cpaior-GayHS15[130], DejemeppeD14[93], HoundjiSWD14[183], SunLYL10[349]		
Benchmarks	industrial instance		BonfiettiZLM16[64]	EfthymiouY23[106], PovedaAA23[309], TasselGS23[355], abs-2306-05747[356], OujanaAYB22[292], GroleazNS20[154], Mercier-AubinGQ20[263], NattafM20[278], MalapertN19[254], BofillGSV15[59], BofillEGPSV14[58], BonfiettiLBM11[61], LombardiBMB11[242]		
Benchmarks	industrial partner	${\bf Boudreault SLQ 22[67]}$	LacknerMMWW23[224], ArmstrongGOS21[13]	WinterMMW22[396], LacknerMMWW21[223], VlkHT21[387], Mercier-AubinGQ20[263], GeibingerMM19[135], abs-1911-04766[134], MossigeGSMC17[269], LimtanyakulS12[237], KovacsV06[214], KovacsV04[213]		
Benchmarks	industry partner	BurtLPS15[70]		WinterMMW22[396], ArmstrongGOS21[13], abs-1902-09244[160]		
Benchmarks	instance generator	LacknerMMWW23[224], LacknerMMWW21[223]		abs-2402-00459[279], ArmstrongGOS21[13], abs-1911-04766[134], GoldwaserS17[146], YoungFS17[403], LombardiM09[243], Heipck-eCCS00[171]		
Benchmarks	random instance	LacknerMMWW21[223], WallaceY20[389]	EfthymiouY23[106], LacknerMMWW23[224], WangB23[391], LetortCB15[230], KelbelH11[198]	Mehdizadeh-Somarin23[260], MullerMKP22[272], OuelletQ22[291], abs-2211-14492[348], HanenKP21[159], Klanke-BYE21[203], VlkHT21[387], BenediktMH20[48], Lunardi-BLRV20[249], BenediktSMVH18[49], FahimiOQ18[113], CappartS17[73], Hooker17[181], MossigeGSMC17[269], Madi-WambaB16[251], DerrienPZ14[98], DerrienP14[97], KameugneFSN14[195], LetortCB13[229], BillautHL12[54], LetortBC12[228], LimtanyakulS12[237], BartakS11[34], Hooker06[180], ArtiouchineB05[18], Hooker05[178], Hooker04[177], BeldiceanuC02[42]		

		Table 9: I	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Benchmarks	real-life	GurPAE23[157], SubulanC22[347], WinterMMW22[396], HubnerGSV21[184], QinDCS20[315], WangMD15[392], Bartak02a[32], MartinPY01[258]	LacknerMMWW23[224], OujanaAYB22[292], Astrand0F21[20], KlankeBYE21[203], LacknerMMWW21[223], abs-1911-04766[134], PourDERB18[308], GaySS14[131], LimtanyakulS12[237], Tsang03[368], SimonisC95[345], DincbasSH90[101]	PrataAN23[312], EfthymiouY23[106], IsikYA23[186], PovedaAA23[309], CampeauG22[72], BoudreaultSLQ22[67], GeitzGSSW22[137], GeibingerMM21[136], AstrandJZ20[22], GodetLHS20[143], SacramentoSP20[322], WallaceY20[389], GeibingerMM19[135], MurinR19[273], Laborie18a[221], NishikawaSTT18a[281], CappartS17[73], GelainPRVW17[138], CauwelaertDMS16[76], EvenSH15a[112], EvenSH15[111], GrimesIOS14[152], BessiereHMQW14[53], OzturkTHO13[293], IfrimOS12[185], BartakS11[34], LombardiBMB11[242], TopalogluO11[364], AronssonBK09[15], GarganiR07[125], Limtanyakul07[236], GomesHS06[148], BeniniBGM06[50], KhayatLR06[200], Geske05[139], KovacsEKV05[211], VilimBC05[384], KovacsV04[213], VilimBC04[383], ValleMGT03[369], ElkhyariGJ02a[108], BeldiceanuC02[42], Bartak02[33], VanczaM01[374], BelhadjiI98[46], Darby-DowmanLMZ97[86], Touraivane95[366]
Benchmarks	real-world	abs-2305-19888[170], HeinzNVH22[169], GeibingerMM21[136], KoehlerBFFHPSSS21[205], GeibingerMM19[135], FrohnerTR19[122], abs-1902-09244[160], abs-1911-04766[134], EvenSH15a[112], EvenSH15[111], MelgarejoLS15[6], RendlPHPR12[318], MouraSCL08a[270]	PrataAN23[312], AalianPG23[1], IsikYA23[186], TasselGS23[355], WangB23[391], YuraszeckMCCR23[406], abs-2306-05747[356], MullerMKP22[272], OujanaAYB22[292], ArmstrongGOS21[13], AstrandJZ20[22], TangB20[352], WallaceY20[389], WessenCS20[394], FrimodigS19[121], ParkUJR19[297], LaborieRSV18[222], PourDERB18[308], ShinBBHO18[338], BonfiettiZLM16[64], HechingH16[163], MurphyMB15[274], KelarevaTK13[197], OzturkTHO13[293], LombardiM12[245], BartakS11[34], LopesCSM10[246]	abs-2402-00459[279], Bit-Monnot23[55], JuvinHL23[189], KimCMLLP23[202], PerezGSL23[299], PovedaAA23[309], TardivoDFMP23[354], abs-2312-13682[300], AbreuN22[89], CampeauG22[72], GeitzGSSW22[137], BoudreaultsLQ22[67], FetgoD22[116], ArmstrongGOS22[14], PohlAK22[305], SubulanC22[347], Astrand0F21[20], GeibingerKKMMW21[133], HillTV21[175], AbohashimaEG21[2], KovacsTKSG21[215], SacramentoSP20[322], BehrensLM19[40], ColT19[83], Tom19[363], abs-1901-07914[41], DemirovicS18[95], He0GLW18[161], KameugneFGOQ18[192], Laborie18a[221], NishikawaSTT18[280], NishikawaSTT18a[281], Madi-WambaLOBM17[252], MossigeGSMC17[269], NattafAL17[277], BoothNB16[65], LimHTB16[234], Madi-WambaB16[251], ZarandiKS16[407], BurtLPS15[70], DejemeppeCS15[92], LombardiBM15[241], WangMD15[392], ZhouGL15[416], cpaior-GayHS15[130], BonfiettiLM14[63], DerrienPZ14[98], GrimesIOS14[152], HeinzSSW12[166], SerraNM12[335], SchutFSW11[332], TrojetHL11[367], LombardiM10[244], ZeballosQH10[409], AronssonBK09[15], Laborie09[220], LombardiM09[243], SchuttFSW09[331], abs-0907-0939[302], BarlattCG08[31], GarridoOS08[127], LauLN08[226], WatsonB08[393], KrogtLPHJ07[372], KhemmoudjPB06[201], WolfS05[398], KamarainenS02[190], VanczaM01[374], SakkoutW00[325], Darby-DowmanLMZ97[86], BeckDF97[37], ErtlK91[109]
Benchmarks	supplementary material		MontemanniD23[268]	JuvinHHL23[188], TasselGS23[355], abs-2306-05747[356], BoudreaultSLQ22[67], WinterMMW22[396], Armstrong- GOS21[13], AntuoriHHEN21[11], KovacsTKSG21[215], Lack- nerMMWW21[223], MengZRZL20[262]
Benchmarks	zenodo	LacknerMMWW23[224], SacramentoSP20[322]		KimCMLLP23[202], WinterMMW22[396], ArmstrongGOS21[13]
Algorithms Algorithms	bi-partite matching edge-finder	KameugneFND23[193], FetgoD22[116], KameugneFSN14[195], BaptisteP00[29]	OuelletQ13[289], KelbelH11[198], PapaB98[296]	Simonis07[344], Kumar03[219] BaptisteB18[26], BonfiettiZLM16[64], GuSS13[156], SchuttFSW11[332], SchuttFSW09[331], ValleMGT03[369], SakkoutW00[325], BaptisteP97[28], Zhou97[415]

Table 9: Papers by Domain and Keyword					
Domain	Keyword	High	Medium	Low	
Algorithms	edge-finding	JuvinHHL23[188], KameugneFND23[193], TardivoDFMP23[354], FetgoD22[116], OuelletQ22[291], YangSS19[402], BaptisteB18[26], FahimiOQ18[113], KreterSS17[217], Kameugne15[191], cpaior-GayHS15[130], KameugneFSN14[195], OuelletQ13[289], cpaior-SchuttFS13[329], ClercqPBJ11[81], KameugneFSN11[194], SchuttFSW11[332], Vilim11[382], Vilim09[380], ArtiouchineB05[18], Hooker05[178], VilimBC05[384], VilimBC04[383], BaptisteP00[29], PapaB98[296], BeckDF97[37], BaptisteP97[28]	BoudreaultSLQ22[67], LaborieRSV18[222], Tesch18[360], CauwelaertDMS16[76], DejemeppeCS15[92], LetortCB15[230], LetortCB13[229], LetortBC12[228], LombardiM12[245], LiessM08[232], HoeveGSL07[373], MonetteDD07[265], Vilim04[378], Bartak02[33], SchildW00[327], Zhou97[415]	CampeauG22[72], WallaceY20[389], OuelletQ18[290], NattafAL17[277], Tesch16[359], GayHLS15[128], SialaAH15[340], DerrienP14[97], HeinzSB13[168], GuSS13[156], Ozturk-THO13[293], LimtanyakulS12[237], BeldiceanuCDP11[43], GrimesH11[150], KelbelH11[198], KovacsB11[210], GrimesH10[149], SchuttW10[334], GrimesHM09[151], abs-0907-0939[302], cpaior-Vilim09[381], BeldiceanuCP08[44], KeriK07[199], ArtiguesBF04[16], KovacsV04[213], Sadykov04[323], Vilim03[377], Wolf03[397], Bartak02a[32], Muscettola02[275], Vilim02[376], SakkoutW00[325], Caseau97[75], Zhou96[414], Goltz95[147]	
Algorithms	energetic reasoning	TardivoDFMP23[354], FetgoD22[116], OuelletQ22[291], HanenKP21[159], OuelletQ18[290], Tesch18[360], NattafAL17[277], Tesch16[359], NattafAL15[276], cpaior-GayHS15[130], DerrienP14[97], cpaior-SchuttFS13[329], LimtanyakulS12[237], HeinzS11[167], Vilim11[382]	KameugneFND23[193], KameugneFGOQ18[192], SchuttFS13[330]	IsikYA23[186], BoudreaultSLQ22[67], ArmstrongGOS21[13], YangSS19[402], Laborie18a[221], BofillCSV17[57], LetortCB15[230], KameugneFSN14[195], LetortCB13[229], OuelletQ13[289], LombardiM12[245], ClercqPBJ11[81], BeldiceanuCDP11[43], LahimerLH11[225], Vilim09[380], abs-0907-0939[302], cpaior-Vilim09[381], Limtanyakul07[236], WolfS05[398], BaptisteP00[29], PapaB98[296]	
Algorithms	max-flow		LopesCSM10[246], MouraSCL08[271], Muscettola02[275]	FanXG21[115], Kumar03[219]	
Algorithms	not-first	KameugneFND23[193], FahimiOQ18[113], KameugneFGOQ18[192], cpaior-GayHS15[130], SchuttFSW11[332], ArtiouchineB05[18], VilimBC05[384]	TardivoDFMP23[354], FetgoD22[116], OuelletQ18[290], DejemeppeCS15[92], Kameugne15[191], KameugneFSN14[195], OuelletQ13[289], SchuttW10[334], MonetteDD07[265], VilimBC04[383], Wolf03[397]	JuvinHHL23[188], BoudreaultSLQ22[67], OuelletQ22[291], CauwelaertDMS16[76], Tesch16[359], LimtanyakulS12[237], KameugneFSN11[194], Vilim09[380]	
Algorithms	not-last	KameugneFND23[193], TardivoDFMP23[354], FahimiOQ18[113], KameugneFGOQ18[192], OuelletQ18[290], cpaior-GayHS15[130], SchuttW10[334], ArtiouchineB05[18], Vilim05[379], VilimBC05[384], Vilim04[378], Wolf03[397]	FetgoD22[116], Tesch18[360], DejemeppeCS15[92], Kameugne15[191], KameugneFSN14[195], OuelletQ13[289], cpaior-SchuttFS13[329], KameugneFSN11[194], SchuttFSW11[332], Vilim11[382], MonetteDD07[265], VilimBC04[383]	JuvinHHL23[188], BoudreaultSLQ22[67], GeitzGSSW22[137], OuelletQ22[291], GodetLHS20[143], YangSS19[402], CauwelaertDMS16[76], LimtanyakulS12[237], GrimesHM09[151], MonetteDH09[266], Vilim09[380], cpaior-Vilim09[381], Vilim09[381], VolfS05[398], Vilim03[377]	
Algorithms	sweep	Tesch18[360], BonfiettiZLM16[64], Tesch16[359], GayHS15[129], LetortCB15[230], NattafAL15[276], SimoninAHL15[342], DerrienPZ14[98], LetortCB13[229], LetortBC12[228], SimoninAHL12[341], ClercqPBJ11[81], abs-0907-0939[302], BeldiceanuP07[45], Wolf03[397], BeldiceanuC02[42]	FahimiOQ18[113], cpaior-GayHS15[130], AronssonBK09[15], WolfS05[398]	KameugneFND23[193], TardivoDFMP23[354], FetgoD22[116], GeitzGSSW22[137], OuelletQ22[291], Kameugne-FGOQ18[192], Madi-WambaLOBM17[252], EvenSH15a[112], EvenSH15[111], GaySS14[131], DerrienP14[97], OuelletQ13[289], BeldiceanuCDP11[43], Vilim11[382], BeldiceanuCP08[44], KovacsB08[209], Simonis07[344], VilimBC05[384], Vilim04[378]	
Algorithms	${ m time-tabling}$	TardivoDFMP23[354], OuelletQ22[291], DemirovicS18[95], FahimiOQ18[113], cpaior-GayHS15[130], OuelletQ13[289], HeinzS11[167], ElkhyariGJ02a[108], Wallace96[388]	WallaceY20[389], abs-1902-01193[8], OuelletQ18[290], Tesch18[360], GayHS15[129], BofillGSV15[59], Vilim11[382], Bartak02[33]	PrataAN23[312], KameugneFND23[193], LacknerMMWW23[224], FetgoD22[116], GeibingerMM21[136], GodetLHS20[143], GeibingerMM19[135], LiuLH19[238], abs-1911-04766[134], BaptisteB18[26], AstrandJZ18[21], KameugneFGOQ18[192], YoungFS17[403], Tesch16[359], ZarandiKS16[407], GayHLS15[128], LimBTBB15[235], VilimLS15[385], WangMD15[392], BofillEGPSV14[58], KameugneFSN14[195], HeinzSB13[168], GuSS13[156], SchuttFS13[330], BonfiettiLBM12[62], ZhangLS12[413], ChapadosJR11[78], ClercqPBJ11[81], KameugneFSN11[194], TopalogluO11[364], ZibranR11a[419], GrimesH10[149], Simonis07[344], Tsang03[368], Bartak02a[32], SchildW00[327]	

7 Examples from Books and Courses

8 Benchmark Sets

8.1 CSPLib

		Table 10: CSPLib scheduling problems						
Nr	Name	Description	CP System	Data	Code	Solutions	Classification	Constraints
59	Energy Cost Aware Scheduling		-	50 TXT	-	-		_
61	RCPSP	Resource-Constrained Scheduling Problem	PyCSP3	PSPLIB	У	PSPLIB	RCPSP	
73	Test Scheduling Problem		ECLiPSe OPL	840 Prolog	У			
77	Stochastic Assignment and Scheduling Problem		OPL MiniZinc	9 DZN	У			

9 Other Examples

References

- [1] Younes Aalian, Gilles Pesant, and Michel Gamache. Optimization of short-term underground mine planning using constraint programming. In Roland H. C. Yap, editor, 29th International Conference on Principles and Practice of Constraint Programming, CP 2023, August 27-31, 2023, Toronto, Canada, volume 280 of LIPIcs, pages 6:1-6:16. Schloss Dagstuhl Leibniz-Zentrum für Informatik, 2023. URL: https://doi.org/10.4230/LIPIcs.CP.2023.6, doi:10.4230/LIPICS.CP.2023.6.
- [2] Hanaa Abohashima, Amr B. Eltawil, and Mohamed S. Gheith. A mathematical programming model and a firefly-based heuristic for real-time traffic signal scheduling with physical constraints. *IEEE Access*, 9:128314–128327, 2021. doi:10.1109/ACCESS.2021.3112600.
- [3] Montserrat Abril, Miguel A. Salido, and Federico Barber. Distributed constraints for large-scale scheduling problems. In Peter van Beek, editor, Principles and Practice of Constraint Programming CP 2005, 11th International Conference, CP 2005, Sitges, Spain, October 1-5, 2005, Proceedings, volume 3709 of Lecture Notes in Computer Science, page 837. Springer, 2005. doi:10.1007/11564751_75.
- [4] Rodrigo Acuna-Agost, Philippe Michelon, Dominique Feillet, and Serigne Gueye. Constraint programming and mixed integer linear programming for rescheduling trains under disrupted operations. In Willem Jan van Hoeve and John N. Hooker, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 6th International Conference, CPAIOR 2009, Pittsburgh, PA, USA, May 27-31, 2009, Proceedings, volume 5547 of Lecture Notes in Computer Science, pages 312–313. Springer, 2009. doi:10.1007/978-3-642-01929-6_24.
- [5] Abderrahmane Aggoun and Nicolas Beldiceanu. Extending CHIP in order to solve complex scheduling and placement problems. In Jean-Paul Delahaye, Philippe Devienne, Philippe Mathieu, and Pascal Yim, editors, JFPL'92, 1ères Journées Francophones de Programmation Logique, 25-27 Mai 1992, Lille, France, page 51, 1992.
- [6] Penélope Aguiar-Melgarejo, Philippe Laborie, and Christine Solnon. A time-dependent no-overlap constraint: Application to urban delivery problems. In Laurent Michel, editor, Integration of AI and OR Techniques in Constraint Programming 12th International Conference, CPAIOR 2015, Barcelona, Spain, May 18-22, 2015, Proceedings, volume 9075 of Lecture Notes in Computer Science, pages 1-17. Springer, 2015. doi:10.1007/978-3-319-18008-3_1.
- [7] Bilal Omar Akram, Nor Kamariah Noordin, Fazirulhisyam Hashim, Mohd Fadlee A. Rasid, Mustafa Ismael Salman, and Abdulrahman M. Abdulghani. Joint scheduling and routing optimization for deterministic hybrid traffic in time-sensitive networks using constraint programming. *IEEE Access*, 11:142764–142779, 2023. doi:10.1109/ACCESS.2023.3343409.
- [8] O. M. Alade and A. O. Amusat. Solving nurse scheduling problem using constraint programming technique. CoRR, abs/1902.01193, 2019. URL: http://arxiv.org/abs/1902.01193, arXiv:1902.01193.
- [9] Samira Alizdeh and Shahram Saeidi. Fuzzy project scheduling with critical path including risk and resource constraints using linear programming. Int. J. Adv. Intell. Paradigms, 16(1):4–17, 2020. doi:10.1504/IJAIP.2020.106687.
- [10] Ola Angelsmark and Peter Jonsson. Some observations on durations, scheduling and allen's algebra. In Rina Dechter, editor, *Principles and Practice of Constraint Programming CP 2000, 6th International Conference, Singapore, September 18-21, 2000, Proceedings*, volume 1894 of *Lecture Notes in Computer Science*, pages 484–488. Springer, 2000. doi:10.1007/3-540-45349-0_35.
- [11] Valentin Antuori, Emmanuel Hebrard, Marie-José Huguet, Siham Essodaigui, and Alain Nguyen. Combining monte carlo tree search and depth first search methods for a car manufacturing workshop scheduling problem. In Laurent D. Michel, editor, 27th International Conference on Principles and Practice of Constraint Programming, CP 2021, Montpellier, France (Virtual Conference), October 25-29, 2021, volume 210 of LIPIcs, pages 14:1-14:16. Schloss Dagstuhl Leibniz-Zentrum für Informatik, 2021. URL: https://doi.org/10.4230/LIPIcs.CP.2021.14, doi:10.4230/LIPICS.CP.2021.14.

- [12] Taha Arbaoui and Farouk Yalaoui. Solving the unrelated parallel machine scheduling problem with additional resources using constraint programming. In Ngoc Thanh Nguyen, Duong Hung Hoang, Tzung-Pei Hong, Hoang Pham, and Bogdan Trawinski, editors, Intelligent Information and Database Systems 10th Asian Conference, ACIIDS 2018, Dong Hoi City, Vietnam, March 19-21, 2018, Proceedings, Part II, volume 10752 of Lecture Notes in Computer Science, pages 716–725. Springer, 2018. doi:10.1007/978-3-319-75420-8_67.
- [13] Eddie Armstrong, Michele Garraffa, Barry O'Sullivan, and Helmut Simonis. The hybrid flexible flowshop with transportation times. In Laurent D. Michel, editor, 27th International Conference on Principles and Practice of Constraint Programming, CP 2021, Montpellier, France (Virtual Conference), October 25-29, 2021, volume 210 of LIPIcs, pages 16:1–16:18. Schloss Dagstuhl Leibniz-Zentrum für Informatik, 2021. URL: https://doi.org/10.4230/LIPIcs.CP.2021.16, doi:10.4230/LIPICS.CP.2021.16.
- [14] Eddie Armstrong, Michele Garraffa, Barry O'Sullivan, and Helmut Simonis. A two-phase hybrid approach for the hybrid flexible flowshop with transportation times. In Pierre Schaus, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 19th International Conference, CPAIOR 2022, Los Angeles, CA, USA, June 20-23, 2022, Proceedings, volume 13292 of Lecture Notes in Computer Science, pages 1–13. Springer, 2022. doi:10.1007/978-3-031-08011-1_1.
- [15] Martin Aronsson, Markus Bohlin, and Per Kreuger. MILP formulations of cumulative constraints for railway scheduling A comparative study. In Jens Clausen and Gabriele Di Stefano, editors, ATMOS 2009 9th Workshop on Algorithmic Approaches for Transportation Modeling, Optimization, and Systems, IT University of Copenhagen, Denmark, September 10, 2009, volume 12 of OASIcs. Schloss Dagstuhl Leibniz-Zentrum fuer Informatik, Germany, 2009. URL: http://drops.dagstuhl.de/opus/volltexte/2009/2141.
- [16] Christian Artigues, Sana Belmokhtar, and Dominique Feillet. A new exact solution algorithm for the job shop problem with sequence-dependent setup times. In Jean-Charles Régin and Michel Rueher, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, First International Conference, CPAIOR 2004, Nice, France, April 20-22, 2004, Proceedings, volume 3011 of Lecture Notes in Computer Science, pages 37-49. Springer, 2004. doi:10.1007/978-3-540-24664-0_3.
- [17] Christian Artigues and François Roubellat. A polynomial activity insertion algorithm in a multi-resource schedule with cumulative constraints and multiple modes. Eur. J. Oper. Res., 127(2):297–316, 2000. doi:10.1016/S0377-2217(99)00496-8.
- [18] Konstantin Artiouchine and Philippe Baptiste. Inter-distance constraint: An extension of the all-different constraint for scheduling equal length jobs. In Peter van Beek, editor, Principles and Practice of Constraint Programming CP 2005, 11th International Conference, CP 2005, Sitges, Spain, October 1-5, 2005, Proceedings, volume 3709 of Lecture Notes in Computer Science, pages 62–76. Springer, 2005. doi:10.1007/11564751_8.
- [19] Max Åstrand. Short-term Underground Mine Scheduling: An Industrial Application of Constraint Programming. PhD thesis, Royal Institute of Technology, Stockholm, Sweden, 2021. URL: https://nbn-resolving.org/urn:nbn:se:kth:diva-294959.
- [20] Max Astrand, Mikael Johansson, and Hamid Reza Feyzmahdavian. Short-term scheduling of production fleets in underground mines using cp-based LNS. In Peter J. Stuckey, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 18th International Conference, CPAIOR 2021, Vienna, Austria, July 5-8, 2021, Proceedings, volume 12735 of Lecture Notes in Computer Science, pages 365–382. Springer, 2021. doi:10.1007/978-3-030-78230-6_23.
- [21] Max Åstrand, Mikael Johansson, and Alessandro Zanarini. Fleet scheduling in underground mines using constraint programming. In Willem Jan van Hoeve, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 15th International Conference, CPAIOR 2018, Delft, The Netherlands, June 26-29, 2018, Proceedings, volume 10848 of Lecture Notes in Computer Science, pages 605-613. Springer, 2018. doi:10.1007/978-3-319-93031-2_44.

- [22] Max Åstrand, Mikael Johansson, and Alessandro Zanarini. Underground mine scheduling of mobile machines using constraint programming and large neighborhood search. Comput. Oper. Res., 123:105036, 2020. URL: https://doi.org/10.1016/j.cor.2020.105036, doi:10.1016/J.COR.2020.105036.
- [23] Amelia Badica, Costin Badica, and Mirjana Ivanovic. Block structured scheduling using constraint logic programming. AI Commun., 33(1):41–57, 2020. doi: 10.3233/AIC-200650.
- [24] Amelia Badica, Costin Badica, Mirjana Ivanovic, and Doina Logofatu. Exploring the space of block structured scheduling processes using constraint logic programming. In Igor V. Kotenko, Costin Badica, Vasily Desnitsky, Didier El Baz, and Mirjana Ivanovic, editors, Intelligent Distributed Computing XIII, 13th International Symposium on Intelligent Distributed Computing, IDC 2019, St. Petersburg, Russia, 7-9 October, 2019, volume 868 of Studies in Computational Intelligence, pages 149–159. Springer, 2019. doi:10.1007/978-3-030-32258-8_17.
- [25] Philippe Baptiste. Constraint-based schedulers, do they really work? In Ian P. Gent, editor, Principles and Practice of Constraint Programming CP 2009, 15th International Conference, CP 2009, Lisbon, Portugal, September 20-24, 2009, Proceedings, volume 5732 of Lecture Notes in Computer Science, page 1. Springer, 2009. doi:10.1007/978-3-642-04244-7_1.
- [26] Philippe Baptiste and Nicolas Bonifas. Redundant cumulative constraints to compute preemptive bounds. Discret. Appl. Math., 234:168-177, 2018. URL: https://doi.org/10.1016/j.dam.2017.05.001, doi:10.1016/J.DAM.2017.05.001.
- [27] Philippe Baptiste, Philippe Laborie, Claude Le Pape, and Wim Nuijten. Constraint-based scheduling and planning. In Francesca Rossi, Peter van Beek, and Toby Walsh, editors, *Handbook of Constraint Programming*, volume 2 of *Foundations of Artificial Intelligence*, pages 761–799. Elsevier, 2006. doi:10.1016/S1574-6526(06)80026-X.
- [28] Philippe Baptiste and Claude Le Pape. Constraint propagation and decomposition techniques for highly disjunctive and highly cumulative project scheduling problems. In Gert Smolka, editor, Principles and Practice of Constraint Programming CP97, Third International Conference, Linz, Austria, October 29 November 1, 1997, Proceedings, volume 1330 of Lecture Notes in Computer Science, pages 375–389. Springer, 1997. URL: https://doi.org/10.1007/BFb0017454, doi:10.1007/BFB0017454.
- [29] Philippe Baptiste and Claude Le Pape. Constraint propagation and decomposition techniques for highly disjunctive and highly cumulative project scheduling problems. Constraints An Int. J., 5(1/2):119–139, 2000. doi:10.1023/A:1009822502231.
- [30] Pierre Baptiste, Bruno Legeard, and Christophe Varnier. Hoist scheduling problem: an approach based on constraint logic programming. In *Proceedings* of the 1992 IEEE International Conference on Robotics and Automation, Nice, France, May 12-14, 1992, pages 1139–1144. IEEE Computer Society, 1992. doi:10.1109/R0B0T.1992.220195.
- [31] Ada Barlatt, Amy Mainville Cohn, and Oleg Yu. Gusikhin. A hybrid approach for solving shift-selection and task-sequencing problems. In Laurent Perron and Michael A. Trick, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 5th International Conference, CPAIOR 2008, Paris, France, May 20-23, 2008, Proceedings, volume 5015 of Lecture Notes in Computer Science, pages 288–292. Springer, 2008. doi:10.1007/978-3-540-68155-7_24.
- [32] Roman Barták. Visopt shopfloor: Going beyond traditional scheduling. In Barry O'Sullivan, editor, Recent Advances in Constraints, Joint ERCIM/CologNet International Workshop on Constraint Solving and Constraint Logic Programming, Cork, Ireland, June 19-21, 2002. Selected Papers, volume 2627 of Lecture Notes in Computer Science, pages 185–199. Springer, 2002. doi:10.1007/3-540-36607-5_14.

- [33] Roman Barták. Visopt shopfloor: On the edge of planning and scheduling. In Pascal Van Hentenryck, editor, Principles and Practice of Constraint Programming CP 2002, 8th International Conference, CP 2002, Ithaca, NY, USA, September 9-13, 2002, Proceedings, volume 2470 of Lecture Notes in Computer Science, pages 587–602. Springer, 2002. doi:10.1007/3-540-46135-3_39.
- [34] Roman Barták and Miguel A. Salido. Constraint satisfaction for planning and scheduling problems. Constraints An Int. J., 16(3):223-227, 2011. URL: https://doi.org/10.1007/s10601-011-9109-4, doi:10.1007/S10601-011-9109-4.
- [35] Andrea Bartolini, Andrea Borghesi, Thomas Bridi, Michele Lombardi, and Michela Milano. Proactive workload dispatching on the EURORA supercomputer. In Barry O'Sullivan, editor, Principles and Practice of Constraint Programming 20th International Conference, CP 2014, Lyon, France, September 8-12, 2014. Proceedings, volume 8656 of Lecture Notes in Computer Science, pages 765–780. Springer, 2014. doi:10.1007/978-3-319-10428-7_55.
- [36] Mohammadreza Barzegaran, Bahram Zarrin, and Paul Pop. Quality-of-control-aware scheduling of communication in tsn-based fog computing platforms using constraint programming. In Anton Cervin and Yang Yang, editors, 2nd Workshop on Fog Computing and the IoT, Fog-IoT 2020, April 21, 2020, Sydney, Australia, volume 80 of OASIcs, pages 3:1–3:9. Schloss Dagstuhl Leibniz-Zentrum für Informatik, 2020. URL: https://doi.org/10.4230/OASIcs.Fog-IoT.2020.3, doi:10.4230/OASICS.FOg-IoT.2020.3.
- [37] J. Christopher Beck, Andrew J. Davenport, and Mark S. Fox. Five pitfalls of empirical scheduling research. In Gert Smolka, editor, *Principles and Practice of Constraint Programming CP97*, Third International Conference, Linz, Austria, October 29 November 1, 1997, Proceedings, volume 1330 of Lecture Notes in Computer Science, pages 390–404. Springer, 1997. URL: https://doi.org/10.1007/BFb0017455, doi:10.1007/BFB0017455.
- [38] J. Christopher Beck, T. K. Feng, and Jean-Paul Watson. Combining constraint programming and local search for job-shop scheduling. *INFORMS J. Comput.*, 23(1):1-14, 2011. URL: https://doi.org/10.1287/ijoc.1100.0388, doi:10.1287/IJOC.1100.0388.
- [39] Mirza Omer Beg and Peter van Beek. A constraint programming approach for integrated spatial and temporal scheduling for clustered architectures. ACM Trans. Embed. Comput. Syst., 13(1):14:1-14:23, 2013. URL: http://doi.acm.org/10.1145/2512470, doi:10.1145/2512470.
- [40] Jan Kristof Behrens, Ralph Lange, and Masoumeh Mansouri. A constraint programming approach to simultaneous task allocation and motion scheduling for industrial dual-arm manipulation tasks. In *International Conference on Robotics and Automation, ICRA 2019, Montreal, QC, Canada, May 20-24, 2019*, pages 8705–8711. IEEE, 2019. doi:10.1109/ICRA.2019.8794022.
- [41] Jan Kristof Behrens, Ralph Lange, and Masoumeh Mansouri. A constraint programming approach to simultaneous task allocation and motion scheduling for industrial dual-arm manipulation tasks. CoRR, abs/1901.07914, 2019. URL: http://arxiv.org/abs/1901.07914, arXiv:1901.07914.
- [42] Nicolas Beldiceanu and Mats Carlsson. A new multi-resource cumulatives constraint with negative heights. In Pascal Van Hentenryck, editor, Principles and Practice of Constraint Programming CP 2002, 8th International Conference, CP 2002, Ithaca, NY, USA, September 9-13, 2002, Proceedings, volume 2470 of Lecture Notes in Computer Science, pages 63-79. Springer, 2002. doi:10.1007/3-540-46135-3_5.
- [43] Nicolas Beldiceanu, Mats Carlsson, Sophie Demassey, and Emmanuel Poder. New filtering for the *cumulative* constraint in the context of non-overlapping rectangles. *Ann. Oper. Res.*, 184(1):27–50, 2011. URL: https://doi.org/10.1007/s10479-010-0731-0, doi:10.1007/S10479-010-0731-0.
- [44] Nicolas Beldiceanu, Mats Carlsson, and Emmanuel Poder. New filtering for the cumulative constraint in the context of non-overlapping rectangles. In Laurent Perron and Michael A. Trick, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 5th International Conference, CPAIOR 2008, Paris, France, May 20-23, 2008, Proceedings, volume 5015 of Lecture Notes in Computer Science, pages 21–35. Springer, 2008. doi:10.1007/978-3-540-68155-7_5.

- [45] Nicolas Beldiceanu and Emmanuel Poder. A continuous multi-resources cumulative constraint with positive-negative resource consumption-production. In Pascal Van Hentenryck and Laurence A. Wolsey, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 4th International Conference, CPAIOR 2007, Brussels, Belgium, May 23-26, 2007, Proceedings, volume 4510 of Lecture Notes in Computer Science, pages 214–228. Springer, 2007. doi:10.1007/978-3-540-72397-4_16.
- [46] Said Belhadji and Amar Isli. Temporal constraint satisfaction techniques in job shop scheduling problem solving. Constraints An Int. J., 3(2/3):203-211, 1998. doi:10.1023/A:1009777711218.
- [47] Till Bender, David Wittwer, and Thorsten Schmidt. Applying constraint programming to the multi-mode scheduling problem in harvest logistics. In Martijn Mes, Eduardo Lalla-Ruiz, and Stefan Voß, editors, Computational Logistics 12th International Conference, ICCL 2021, Enschede, The Netherlands, September 27-29, 2021, Proceedings, volume 13004 of Lecture Notes in Computer Science, pages 562-577. Springer, 2021. doi:10.1007/978-3-030-87672-2_37.
- [48] Ondrej Benedikt, István Módos, and Zdenek Hanzálek. Power of pre-processing: production scheduling with variable energy pricing and power-saving states. Constraints An Int. J., 25(3-4):300-318, 2020. URL: https://doi.org/10.1007/s10601-020-09317-y, doi:10.1007/S10601-020-09317-Y.
- [49] Ondrej Benedikt, Premysl Sucha, István Módos, Marek Vlk, and Zdenek Hanzálek. Energy-aware production scheduling with power-saving modes. In Willem Jan van Hoeve, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 15th International Conference, CPAIOR 2018, Delft, The Netherlands, June 26-29, 2018, Proceedings, volume 10848 of Lecture Notes in Computer Science, pages 72-81. Springer, 2018. doi:10.1007/978-3-319-93031-2_6.
- [50] Luca Benini, Davide Bertozzi, Alessio Guerri, and Michela Milano. Allocation, scheduling and voltage scaling on energy aware mpsocs. In J. Christopher Beck and Barbara M. Smith, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, Third International Conference, CPAIOR 2006, Cork, Ireland, May 31 June 2, 2006, Proceedings, volume 3990 of Lecture Notes in Computer Science, pages 44–58. Springer, 2006. doi:10.1007/11757375_6.
- [51] E. Bensana, Michel Lemaître, and Gérard Verfaillie. Earth observation satellite management. Constraints An Int. J., 4(3):293–299, 1999. doi:10.1023/A: 1026488509554.
- [52] Timo Berthold, Stefan Heinz, Marco E. Lübbecke, Rolf H. Möhring, and Jens Schulz. A constraint integer programming approach for resource-constrained project scheduling. In Andrea Lodi, Michela Milano, and Paolo Toth, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 7th International Conference, CPAIOR 2010, Bologna, Italy, June 14-18, 2010. Proceedings, volume 6140 of Lecture Notes in Computer Science, pages 313-317. Springer, 2010. doi:10.1007/978-3-642-13520-0_34.
- [53] Christian Bessiere, Emmanuel Hebrard, Marc-André Ménard, Claude-Guy Quimper, and Toby Walsh. Buffered resource constraint: Algorithms and complexity. In Helmut Simonis, editor, Integration of AI and OR Techniques in Constraint Programming 11th International Conference, CPAIOR 2014, Cork, Ireland, May 19-23, 2014. Proceedings, volume 8451 of Lecture Notes in Computer Science, pages 318-333. Springer, 2014. doi:10.1007/978-3-319-07046-9_23.
- [54] Jean-Charles Billaut, Emmanuel Hebrard, and Pierre Lopez. Complete characterization of near-optimal sequences for the two-machine flow shop scheduling problem. In Nicolas Beldiceanu, Narendra Jussien, and Eric Pinson, editors, Integration of AI and OR Techniques in Contraint Programming for Combinatorial Optimization Problems 9th International Conference, CPAIOR 2012, Nantes, France, May 28 June 1, 2012. Proceedings, volume 7298 of Lecture Notes in Computer Science, pages 66–80. Springer, 2012. doi:10.1007/978-3-642-29828-8_5.
- [55] Arthur Bit-Monnot. Enhancing hybrid CP-SAT search for disjunctive scheduling. In Kobi Gal, Ann Nowé, Grzegorz J. Nalepa, Roy Fairstein, and Roxana Radulescu, editors, ECAI 2023 26th European Conference on Artificial Intelligence, September 30 October 4, 2023, Kraków, Poland Including 12th Conference

- on Prestigious Applications of Intelligent Systems (PAIS 2023), volume 372 of Frontiers in Artificial Intelligence and Applications, pages 255–262. IOS Press, 2023. doi:10.3233/FAIA230278.
- [56] Grzegorz Bocewicz, Irena Bach, and Zbigniew Antoni Banaszak. Logic-algebraic method based and constraints programming driven approach to agvs scheduling. Int. J. Intell. Inf. Database Syst., 3(1):56–74, 2009. doi:10.1504/IJIIDS.2009.023038.
- [57] Miquel Bofill, Jordi Coll, Josep Suy, and Mateu Villaret. An efficient SMT approach to solve mrcpsp/max instances with tight constraints on resources. In J. Christopher Beck, editor, Principles and Practice of Constraint Programming 23rd International Conference, CP 2017, Melbourne, VIC, Australia, August 28 September 1, 2017, Proceedings, volume 10416 of Lecture Notes in Computer Science, pages 71–79. Springer, 2017. doi:10.1007/978-3-319-66158-2_5.
- [58] Miquel Bofill, Joan Espasa, Marc Garcia, Miquel Palahí, Josep Suy, and Mateu Villaret. Scheduling B2B meetings. In Barry O'Sullivan, editor, Principles and Practice of Constraint Programming 20th International Conference, CP 2014, Lyon, France, September 8-12, 2014. Proceedings, volume 8656 of Lecture Notes in Computer Science, pages 781–796. Springer, 2014. doi:10.1007/978-3-319-10428-7_56.
- [59] Miquel Bofill, Marc Garcia, Josep Suy, and Mateu Villaret. Maxsat-based scheduling of B2B meetings. In Laurent Michel, editor, Integration of AI and OR Techniques in Constraint Programming 12th International Conference, CPAIOR 2015, Barcelona, Spain, May 18-22, 2015, Proceedings, volume 9075 of Lecture Notes in Computer Science, pages 65-73. Springer, 2015. doi:10.1007/978-3-319-18008-3_5.
- [60] Alessio Bonfietti. A constraint programming scheduling solver for the mpopt programming environment. *Intelligenza Artificiale*, 10(1):65–77, 2016. doi: 10.3233/IA-160095.
- [61] Alessio Bonfietti, Michele Lombardi, Luca Benini, and Michela Milano. A constraint based approach to cyclic RCPSP. In Jimmy Ho-Man Lee, editor, Principles and Practice of Constraint Programming CP 2011 17th International Conference, CP 2011, Perugia, Italy, September 12-16, 2011. Proceedings, volume 6876 of Lecture Notes in Computer Science, pages 130–144. Springer, 2011. doi:10.1007/978-3-642-23786-7_12.
- [62] Alessio Bonfietti, Michele Lombardi, Luca Benini, and Michela Milano. Global cyclic cumulative constraint. In Nicolas Beldiceanu, Narendra Jussien, and Eric Pinson, editors, Integration of AI and OR Techniques in Contraint Programming for Combinatorial Optimization Problems 9th International Conference, CPAIOR 2012, Nantes, France, May 28 June 1, 2012. Proceedings, volume 7298 of Lecture Notes in Computer Science, pages 81–96. Springer, 2012. doi: 10.1007/978-3-642-29828-8_6.
- [63] Alessio Bonfietti, Michele Lombardi, and Michela Milano. Disregarding duration uncertainty in partial order schedules? yes, we can! In Helmut Simonis, editor, Integration of AI and OR Techniques in Constraint Programming 11th International Conference, CPAIOR 2014, Cork, Ireland, May 19-23, 2014. Proceedings, volume 8451 of Lecture Notes in Computer Science, pages 210-225. Springer, 2014. doi:10.1007/978-3-319-07046-9_15.
- [64] Alessio Bonfietti, Alessandro Zanarini, Michele Lombardi, and Michela Milano. The multirate resource constraint. In Michel Rueher, editor, Principles and Practice of Constraint Programming 22nd International Conference, CP 2016, Toulouse, France, September 5-9, 2016, Proceedings, volume 9892 of Lecture Notes in Computer Science, pages 113–129. Springer, 2016. doi:10.1007/978-3-319-44953-1_8.
- [65] Kyle E. C. Booth, Goldie Nejat, and J. Christopher Beck. A constraint programming approach to multi-robot task allocation and scheduling in retirement homes. In Michel Rueher, editor, Principles and Practice of Constraint Programming 22nd International Conference, CP 2016, Toulouse, France, September 5-9, 2016, Proceedings, volume 9892 of Lecture Notes in Computer Science, pages 539–555. Springer, 2016. doi:10.1007/978-3-319-44953-1_34.
- [66] Eric Boucher, Astrid Bachelu, Christophe Varnier, Pierre Baptiste, and Bruno Legeard. Multi-criteria comparison between algorithmic, constraint logic and specific constraint programming on a real schedulingt problem. In Mark Wallace, editor, Proceedings of the Third International Conference on the Practical Application of Constraint Technology, PACT 1997, Westminster Central Hall, London, UK, April 23-25, 1997, pages 47-64. Practical Application Company Ltd., 1997.

- [67] Raphaël Boudreault, Vanessa Simard, Daniel Lafond, and Claude-Guy Quimper. A constraint programming approach to ship refit project scheduling. In Christine Solnon, editor, 28th International Conference on Principles and Practice of Constraint Programming, CP 2022, July 31 to August 8, 2022, Haifa, Israel, volume 235 of LIPIcs, pages 10:1–10:16. Schloss Dagstuhl Leibniz-Zentrum für Informatik, 2022. URL: https://doi.org/10.4230/LIPIcs.CP.2022.10, doi:10.4230/LIPICS.CP.2022.10.
- [68] Eric Bourreau, Thierry Garaix, Matthieu Gondran, Philippe Lacomme, and Nikolay Tchernev. A constraint-programming based decomposition method for the generalised workforce scheduling and routing problem (GWSRP). *Int. J. Prod. Res.*, 60(4):1265–1283, 2022. doi:10.1080/00207543.2020.1856436.
- [69] Silvia Breitinger and Hendrik C. R. Lock. Using constraint logic programming for industrial scheduling problems. In Christoph Beierle and Lutz Plümer, editors, Logic Programming: Formal Methods and Practical Applications, Studies in Computer Science and Artificial Intelligence, pages 273–299. Elsevier Science B.V./North-Holland, 1995.
- [70] Christina N. Burt, Nir Lipovetzky, Adrian R. Pearce, and Peter J. Stuckey. Scheduling with fixed maintenance, shared resources and nonlinear feedrate constraints: A mine planning case study. In Laurent Michel, editor, Integration of AI and OR Techniques in Constraint Programming 12th International Conference, CPAIOR 2015, Barcelona, Spain, May 18-22, 2015, Proceedings, volume 9075 of Lecture Notes in Computer Science, pages 91–107. Springer, 2015. doi: 10.1007/978-3-319-18008-3_7.
- [71] Jordi Coll Caballero. Scheduling through logic-based tools. Constraints An Int. J., 28(3):510, 2023. URL: https://doi.org/10.1007/s10601-023-09357-0, doi:10.1007/s10601-023-09357-0.
- [72] Louis-Pierre Campeau and Michel Gamache. Short- and medium-term optimization of underground mine planning using constraint programming. Constraints An Int. J., 27(4):414-431, 2022. URL: https://doi.org/10.1007/s10601-022-09337-w, doi:10.1007/S10601-022-09337-W.
- [73] Quentin Cappart and Pierre Schaus. Rescheduling railway traffic on real time situations using time-interval variables. In Domenico Salvagnin and Michele Lombardi, editors, Integration of AI and OR Techniques in Constraint Programming 14th International Conference, CPAIOR 2017, Padua, Italy, June 5-8, 2017, Proceedings, volume 10335 of Lecture Notes in Computer Science, pages 312–327. Springer, 2017. doi:10.1007/978-3-319-59776-8_26.
- [74] Tom Carchrae, J. Christopher Beck, and Eugene C. Freuder. Methods to learn abstract scheduling models. In Peter van Beek, editor, *Principles and Practice of Constraint Programming CP 2005*, 11th International Conference, CP 2005, Sitges, Spain, October 1-5, 2005, Proceedings, volume 3709 of Lecture Notes in Computer Science, page 842. Springer, 2005. doi:10.1007/11564751_80.
- [75] Yves Caseau. Using constraint propagation for complex scheduling problems: Managing size, complex resources and travel. In Gert Smolka, editor, Principles and Practice of Constraint Programming CP97, Third International Conference, Linz, Austria, October 29 November 1, 1997, Proceedings, volume 1330 of Lecture Notes in Computer Science, pages 163–166. Springer, 1997. URL: https://doi.org/10.1007/BFb0017437, doi:10.1007/BFB0017437.
- [76] Sascha Van Cauwelaert, Cyrille Dejemeppe, Jean-Noël Monette, and Pierre Schaus. Efficient filtering for the unary resource with family-based transition times. In Michel Rueher, editor, Principles and Practice of Constraint Programming 22nd International Conference, CP 2016, Toulouse, France, September 5-9, 2016, Proceedings, volume 9892 of Lecture Notes in Computer Science, pages 520–535. Springer, 2016. doi:10.1007/978-3-319-44953-1_33.
- [77] Amedeo Cesta, Angelo Oddi, and Stephen F. Smith. Scheduling multi-capacitated resources under complex temporal constraints. In Michael J. Maher and Jean-Francois Puget, editors, Principles and Practice of Constraint Programming CP98, 4th International Conference, Pisa, Italy, October 26-30, 1998, Proceedings, volume 1520 of Lecture Notes in Computer Science, page 465. Springer, 1998. doi:10.1007/3-540-49481-2_36.

- [78] Nicolas Chapados, Marc Joliveau, and Louis-Martin Rousseau. Retail store workforce scheduling by expected operating income maximization. In Tobias Achterberg and J. Christopher Beck, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems 8th International Conference, CPAIOR 2011, Berlin, Germany, May 23-27, 2011. Proceedings, volume 6697 of Lecture Notes in Computer Science, pages 53-58. Springer, 2011. doi:10.1007/978-3-642-21311-3_7.
- [79] Yingyi Chu and Quanshi Xia. A hybrid algorithm for a class of resource constrained scheduling problems. In Roman Barták and Michela Milano, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, Second International Conference, CPAIOR 2005, Prague, Czech Republic, May 30 June 1, 2005, Proceedings, volume 3524 of Lecture Notes in Computer Science, pages 110–124. Springer, 2005. doi:10.1007/11493853_10.
- [80] André A. Ciré, Elvin Coban, and John N. Hooker. Mixed integer programming vs. logic-based benders decomposition for planning and scheduling. In Carla P. Gomes and Meinolf Sellmann, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 10th International Conference, CPAIOR 2013, Yorktown Heights, NY, USA, May 18-22, 2013. Proceedings, volume 7874 of Lecture Notes in Computer Science, pages 325–331. Springer, 2013. doi:10.1007/978-3-642-38171-3_22.
- [81] Alexis De Clercq, Thierry Petit, Nicolas Beldiceanu, and Narendra Jussien. Filtering algorithms for discrete cumulative problems with overloads of resource. In Jimmy Ho-Man Lee, editor, Principles and Practice of Constraint Programming CP 2011 17th International Conference, CP 2011, Perugia, Italy, September 12-16, 2011. Proceedings, volume 6876 of Lecture Notes in Computer Science, pages 240-255. Springer, 2011. doi:10.1007/978-3-642-23786-7_20.
- [82] Elvin Coban and John N. Hooker. Single-facility scheduling over long time horizons by logic-based benders decomposition. In Andrea Lodi, Michela Milano, and Paolo Toth, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 7th International Conference, CPAIOR 2010, Bologna, Italy, June 14-18, 2010. Proceedings, volume 6140 of Lecture Notes in Computer Science, pages 87-91. Springer, 2010. doi:10.1007/978-3-642-13520-0_11.
- [83] Giacomo Da Col and Erich Christian Teppan. Industrial size job shop scheduling tackled by present day CP solvers. In Thomas Schiex and Simon de Givry, editors, Principles and Practice of Constraint Programming 25th International Conference, CP 2019, Stamford, CT, USA, September 30 October 4, 2019, Proceedings, volume 11802 of Lecture Notes in Computer Science, pages 144–160. Springer, 2019. doi:10.1007/978-3-030-30048-7_9.
- [84] Yves Colombani. Constraint programming: an efficient and practical approach to solving the job-shop problem. In Eugene C. Freuder, editor, Proceedings of the Second International Conference on Principles and Practice of Constraint Programming, Cambridge, Massachusetts, USA, August 19-22, 1996, volume 1118 of Lecture Notes in Computer Science, pages 149–163. Springer, 1996. doi:10.1007/3-540-61551-2_72.
- [85] Emilie Danna and Laurent Perron. Structured vs. unstructured large neighborhood search: A case study on job-shop scheduling problems with earliness and tardiness costs. In Francesca Rossi, editor, Principles and Practice of Constraint Programming CP 2003, 9th International Conference, CP 2003, Kinsale, Ireland, September 29 October 3, 2003, Proceedings, volume 2833 of Lecture Notes in Computer Science, pages 817–821. Springer, 2003. doi:10.1007/978-3-540-45193-8_59.
- [86] Ken Darby-Dowman, James Little, Gautam Mitra, and Marco Zaffalon. Constraint logic programming and integer programming approaches and their collaboration in solving an assignment scheduling problem. Constraints An Int. J., 1(3):245–264, 1997. doi:10.1007/BF00137871.
- [87] Andrew J. Davenport. Integrated maintenance scheduling for semiconductor manufacturing. In Andrea Lodi, Michela Milano, and Paolo Toth, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 7th International Conference, CPAIOR 2010, Bologna, Italy, June 14-18, 2010. Proceedings, volume 6140 of Lecture Notes in Computer Science, pages 92–96. Springer, 2010. doi:10.1007/978-3-642-13520-0_12.

- [88] Andrew J. Davenport, Jayant Kalagnanam, Chandra Reddy, Stuart Siegel, and John Hou. An application of constraint programming to generating detailed operations schedules for steel manufacturing. In Christian Bessiere, editor, Principles and Practice of Constraint Programming CP 2007, 13th International Conference, CP 2007, Providence, RI, USA, September 23-27, 2007, Proceedings, volume 4741 of Lecture Notes in Computer Science, pages 64-76. Springer, 2007. doi:10.1007/978-3-540-74970-7_7.
- [89] Levi Ribeiro de Abreu and Marcelo Seido Nagano. A new hybridization of adaptive large neighborhood search with constraint programming for open shop scheduling with sequence-dependent setup times. Comput. Ind. Eng., 168:108128, 2022. URL: https://doi.org/10.1016/j.cie.2022.108128, doi:10.1016/j.cie.2022.108128.
- [90] Levi Ribeiro de Abreu, Marcelo Seido Nagano, and Bruno A. Prata. A new two-stage constraint programming approach for open shop scheduling problem with machine blocking. Int. J. Prod. Res., 61(24):8560–8579, 2023. doi:10.1080/00207543.2022.2154404.
- [91] Cyrille Dejemeppe. Constraint programming algorithms and models for scheduling applications. PhD thesis, Catholic University of Louvain, Louvain-la-Neuve, Belgium, 2016. URL: https://hdl.handle.net/2078.1/178078.
- [92] Cyrille Dejemeppe, Sascha Van Cauwelaert, and Pierre Schaus. The unary resource with transition times. In Gilles Pesant, editor, Principles and Practice of Constraint Programming 21st International Conference, CP 2015, Cork, Ireland, August 31 September 4, 2015, Proceedings, volume 9255 of Lecture Notes in Computer Science, pages 89–104. Springer, 2015. doi:10.1007/978-3-319-23219-5_7.
- [93] Cyrille Dejemeppe and Yves Deville. Continuously degrading resource and interval dependent activity durations in nuclear medicine patient scheduling. In Helmut Simonis, editor, Integration of AI and OR Techniques in Constraint Programming 11th International Conference, CPAIOR 2014, Cork, Ireland, May 19-23, 2014. Proceedings, volume 8451 of Lecture Notes in Computer Science, pages 284-292. Springer, 2014. doi:10.1007/978-3-319-07046-9_20.
- [94] Sophie Demassey. Méthodes hybrides de programmation par contraintes et programmation linéaire pour le problème d'ordonnancement de projet à contraintes de ressources. (Hybrid Constraint Programming-Integer Linear Programming approaches for the Resource-Constrained Project Scheduling Problem). PhD thesis, University of Avignon, France, 2003. URL: https://tel.archives-ouvertes.fr/tel-00293564.
- [95] Emir Demirovic and Peter J. Stuckey. Constraint programming for high school timetabling: A scheduling-based model with hot starts. In Willem Jan van Hoeve, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 15th International Conference, CPAIOR 2018, Delft, The Netherlands, June 26-29, 2018, Proceedings, volume 10848 of Lecture Notes in Computer Science, pages 135-152. Springer, 2018. doi:10.1007/978-3-319-93031-2_10.
- [96] Alban Derrien. Ordonnancement cumulatif en programmation par contraintes: caractérisation énergétique des raisonnements et solutions robustes. (Cumulative scheduling in constraint programming: energetic characterization of reasoning and robust solutions). PhD thesis, École des mines de Nantes, France, 2015. URL: https://tel.archives-ouvertes.fr/tel-01242789.
- [97] Alban Derrien and Thierry Petit. A new characterization of relevant intervals for energetic reasoning. In Barry O'Sullivan, editor, Principles and Practice of Constraint Programming 20th International Conference, CP 2014, Lyon, France, September 8-12, 2014. Proceedings, volume 8656 of Lecture Notes in Computer Science, pages 289-297. Springer, 2014. doi:10.1007/978-3-319-10428-7_22.
- [98] Alban Derrien, Thierry Petit, and Stéphane Zampelli. A declarative paradigm for robust cumulative scheduling. In Barry O'Sullivan, editor, Principles and Practice of Constraint Programming 20th International Conference, CP 2014, Lyon, France, September 8-12, 2014. Proceedings, volume 8656 of Lecture Notes in Computer Science, pages 298–306. Springer, 2014. doi:10.1007/978-3-319-10428-7_23.

- [99] Stefano Di Alesio, Shiva Nejati, Lionel C. Briand, and Arnaud Gotlieb. Worst-case scheduling of software tasks A constraint optimization model to support performance testing. In Barry O'Sullivan, editor, Principles and Practice of Constraint Programming 20th International Conference, CP 2014, Lyon, France, September 8-12, 2014. Proceedings, volume 8656 of Lecture Notes in Computer Science, pages 813–830. Springer, 2014. doi:10.1007/978-3-319-10428-7_58.
- [100] Bistra Dilkina, Lei Duan, and William S. Havens. Extending systematic local search for job shop scheduling problems. In Peter van Beek, editor, Principles and Practice of Constraint Programming CP 2005, 11th International Conference, CP 2005, Sitges, Spain, October 1-5, 2005, Proceedings, volume 3709 of Lecture Notes in Computer Science, pages 762–766. Springer, 2005. doi:10.1007/11564751_60.
- [101] Mehmet Dincbas, Helmut Simonis, and Pascal Van Hentenryck. Solving large combinatorial problems in logic programming. J. Log. Program., 8(1):75–93, 1990. doi:10.1016/0743-1066(90)90052-7.
- [102] Grégoire Dooms and Pascal Van Hentenryck. Gap reduction techniques for online stochastic project scheduling. In Laurent Perron and Michael A. Trick, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 5th International Conference, CPAIOR 2008, Paris, France, May 20-23, 2008, Proceedings, volume 5015 of Lecture Notes in Computer Science, pages 66-81. Springer, 2008. doi:10.1007/978-3-540-68155-7_8.
- [103] Seyed Hossein Hashemi Doulabi, Louis-Martin Rousseau, and Gilles Pesant. A constraint programming-based column generation approach for operating room planning and scheduling. In Helmut Simonis, editor, Integration of AI and OR Techniques in Constraint Programming 11th International Conference, CPAIOR 2014, Cork, Ireland, May 19-23, 2014. Proceedings, volume 8451 of Lecture Notes in Computer Science, pages 455-463. Springer, 2014. doi:10.1007/978-3-319-07046-9_32.
- [104] Seyed Hossein Hashemi Doulabi, Louis-Martin Rousseau, and Gilles Pesant. A constraint-programming-based branch-and-price-and-cut approach for operating room planning and scheduling. INFORMS J. Comput., 28(3):432–448, 2016. URL: https://doi.org/10.1287/ijoc.2015.0686, doi:10.1287/IJOC.2015.0686.
- [105] Emrah B. Edis and Ceyda Oguz. Parallel machine scheduling with additional resources: A lagrangian-based constraint programming approach. In Tobias Achterberg and J. Christopher Beck, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems 8th International Conference, CPAIOR 2011, Berlin, Germany, May 23-27, 2011. Proceedings, volume 6697 of Lecture Notes in Computer Science, pages 92-98. Springer, 2011. doi:10.1007/978-3-642-21311-3_10.
- [106] Nikolaos Efthymiou and Neil Yorke-Smith. Predicting the optimal period for cyclic hoist scheduling problems. In André A. Ciré, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 20th International Conference, CPAIOR 2023, Nice, France, May 29 June 1, 2023, Proceedings, volume 13884 of Lecture Notes in Computer Science, pages 238–253. Springer, 2023. doi:10.1007/978-3-031-33271-5_16.
- [107] Abdallah Elkhyari, Christelle Guéret, and Narendra Jussien. Conflict-based repair techniques for solving dynamic scheduling problems. In Pascal Van Hentenryck, editor, Principles and Practice of Constraint Programming CP 2002, 8th International Conference, CP 2002, Ithaca, NY, USA, September 9-13, 2002, Proceedings, volume 2470 of Lecture Notes in Computer Science, pages 702–707. Springer, 2002. doi:10.1007/3-540-46135-3_49.
- [108] Abdallah Elkhyari, Christelle Guéret, and Narendra Jussien. Solving dynamic resource constraint project scheduling problems using new constraint programming tools. In Edmund K. Burke and Patrick De Causmaecker, editors, Practice and Theory of Automated Timetabling IV, 4th International Conference, PATAT 2002, Gent, Belgium, August 21-23, 2002, Selected Revised Papers, volume 2740 of Lecture Notes in Computer Science, pages 39–62. Springer, 2002. doi: 10.1007/978-3-540-45157-0_3.
- [109] M. Anton Ertl and Andreas Krall. Optimal instruction scheduling using constraint logic programming. In Jan Maluszynski and Martin Wirsing, editors, Programming Language Implementation and Logic Programming, 3rd International Symposium, PLILP'91, Passau, Germany, August 26-28, 1991, Proceedings, volume 528 of Lecture Notes in Computer Science, pages 75–86. Springer, 1991. doi:10.1007/3-540-54444-5_89.

- [110] Teresa Escobet, Vicenç Puig, Joseba Quevedo, Pere Palà-Schönwälder, Juli Romera, and W. Adelman. Optimal batch scheduling of a multiproduct dairy process using a combined optimization/constraint programming approach. Comput. Chem. Eng., 124:228-237, 2019. URL: https://doi.org/10.1016/j.compchemeng. 2018.08.040, doi:10.1016/J.COMPCHEMENG.2018.08.040.
- [111] Caroline Even, Andreas Schutt, and Pascal Van Hentenryck. A constraint programming approach for non-preemptive evacuation scheduling. In Gilles Pesant, editor, Principles and Practice of Constraint Programming 21st International Conference, CP 2015, Cork, Ireland, August 31 September 4, 2015, Proceedings, volume 9255 of Lecture Notes in Computer Science, pages 574–591. Springer, 2015. doi:10.1007/978-3-319-23219-5_40.
- [112] Caroline Even, Andreas Schutt, and Pascal Van Hentenryck. A constraint programming approach for non-preemptive evacuation scheduling. CoRR, abs/1505.02487, 2015. URL: http://arxiv.org/abs/1505.02487, arXiv:1505.02487.
- [113] Hamed Fahimi, Yanick Ouellet, and Claude-Guy Quimper. Linear-time filtering algorithms for the disjunctive constraint and a quadratic filtering algorithm for the cumulative not-first not-last. Constraints An Int. J., 23(3):272–293, 2018. URL: https://doi.org/10.1007/s10601-018-9282-9, doi: 10.1007/S10601-018-9282-9.
- [114] Moreno Falaschi, Maurizio Gabbrielli, Kim Marriott, and Catuscia Palamidessi. Constraint logic programming with dynamic scheduling: A semantics based on closure operators. *Inf. Comput.*, 137(1):41-67, 1997. URL: https://doi.org/10.1006/inco.1997.2638, doi:10.1006/INCO.1997.2638.
- [115] Huali Fan, Hegen Xiong, and Mark Goh. Genetic programming-based hyper-heuristic approach for solving dynamic job shop scheduling problem with extended technical precedence constraints. Comput. Oper. Res., 134:105401, 2021. URL: https://doi.org/10.1016/j.cor.2021.105401, doi:10.1016/J.COR.2021.105401.
- [116] Sévérine Betmbe Fetgo and Clémentin Tayou Djamégni. Horizontally elastic edge-finder algorithm for cumulative resource constraint revisited. Oper. Res. Forum, 3(4), 2022. URL: https://doi.org/10.1007/s43069-022-00172-6, doi:10.1007/s43069-022-00172-6.
- [117] Daniel Fontaine, Laurent D. Michel, and Pascal Van Hentenryck. Parallel composition of scheduling solvers. In Claude-Guy Quimper, editor, Integration of AI and OR Techniques in Constraint Programming 13th International Conference, CPAIOR 2016, Banff, AB, Canada, May 29 June 1, 2016, Proceedings, volume 9676 of Lecture Notes in Computer Science, pages 159–169. Springer, 2016. doi:10.1007/978-3-319-33954-2_12.
- [118] Jérôme Fortin, Pawel Zielinski, Didier Dubois, and Hélène Fargier. Interval analysis in scheduling. In Peter van Beek, editor, *Principles and Practice of Constraint Programming CP 2005*, 11th International Conference, CP 2005, Sitges, Spain, October 1-5, 2005, Proceedings, volume 3709 of Lecture Notes in Computer Science, pages 226–240. Springer, 2005. doi:10.1007/11564751_19.
- [119] Jeremy Frank and Elif Kürklü. Mixed discrete and continuous algorithms for scheduling airborne astronomy observations. In Roman Barták and Michela Milano, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, Second International Conference, CPAIOR 2005, Prague, Czech Republic, May 30 June 1, 2005, Proceedings, volume 3524 of Lecture Notes in Computer Science, pages 183–200. Springer, 2005. doi:10.1007/11493853_15.
- [120] Gerhard Friedrich, Melanie Frühstück, Vera Mersheeva, Anna Ryabokon, Maria Sander, Andreas Starzacher, and Erich Teppan. Representing production scheduling with constraint answer set programming. In Marco E. Lübbecke, Arie Koster, Peter Letmathe, Reinhard Madlener, Britta Peis, and Grit Walther, editors, Operations Research Proceedings 2014, Selected Papers of the Annual International Conference of the German Operations Research Society (GOR), RWTH Aachen University, Germany, September 2-5, 2014, pages 159–165. Springer, 2014. doi:10.1007/978-3-319-28697-6_23.

- [121] Sara Frimodig and Christian Schulte. Models for radiation therapy patient scheduling. In Thomas Schiex and Simon de Givry, editors, Principles and Practice of Constraint Programming 25th International Conference, CP 2019, Stamford, CT, USA, September 30 October 4, 2019, Proceedings, volume 11802 of Lecture Notes in Computer Science, pages 421–437. Springer, 2019. doi:10.1007/978-3-030-30048-7_25.
- [122] Nikolaus Frohner, Stephan Teuschl, and Günther R. Raidl. Casual employee scheduling with constraint programming and metaheuristics. In Roberto Moreno-Díaz, Franz Pichler, and Alexis Quesada-Arencibia, editors, Computer Aided Systems Theory EUROCAST 2019 17th International Conference, Las Palmas de Gran Canaria, Spain, February 17-22, 2019, Revised Selected Papers, Part I, volume 12013 of Lecture Notes in Computer Science, pages 279–287. Springer, 2019. doi:10.1007/978-3-030-45093-9_34.
- [123] Daniel Frost and Rina Dechter. Optimizing with constraints: A case study in scheduling maintenance of electric power units. In Michael J. Maher and Jean-Francois Puget, editors, Principles and Practice of Constraint Programming CP98, 4th International Conference, Pisa, Italy, October 26-30, 1998, Proceedings, volume 1520 of Lecture Notes in Computer Science, page 469. Springer, 1998. doi:10.1007/3-540-49481-2_40.
- [124] Cristian Galleguillos, Zeynep Kiziltan, Alina Sîrbu, and Özalp Babaoglu. Constraint programming-based job dispatching for modern HPC applications. In Thomas Schiex and Simon de Givry, editors, Principles and Practice of Constraint Programming 25th International Conference, CP 2019, Stamford, CT, USA, September 30 October 4, 2019, Proceedings, volume 11802 of Lecture Notes in Computer Science, pages 438–455. Springer, 2019. doi:10.1007/978-3-030-30048-7_26.
- [125] Antoine Gargani and Philippe Refalo. An efficient model and strategy for the steel mill slab design problem. In Christian Bessiere, editor, *Principles and Practice of Constraint Programming CP 2007*, 13th International Conference, CP 2007, Providence, RI, USA, September 23-27, 2007, Proceedings, volume 4741 of Lecture Notes in Computer Science, pages 77-89. Springer, 2007. doi:10.1007/978-3-540-74970-7_8.
- [126] Antonio Garrido, Marlene Arangú, and Eva Onaindia. A constraint programming formulation for planning: from plan scheduling to plan generation. J. Sched., 12(3):227–256, 2009. URL: https://doi.org/10.1007/s10951-008-0083-7, doi:10.1007/s10951-008-0083-7.
- [127] Antonio Garrido, Eva Onaindia, and Óscar Sapena. Planning and scheduling in an e-learning environment. A constraint-programming-based approach. Eng. Appl. Artif. Intell., 21(5):733-743, 2008. URL: https://doi.org/10.1016/j.engappai.2008.03.009, doi:10.1016/j.ENGAPPAI.2008.03.009.
- [128] Steven Gay, Renaud Hartert, Christophe Lecoutre, and Pierre Schaus. Conflict ordering search for scheduling problems. In Gilles Pesant, editor, Principles and Practice of Constraint Programming 21st International Conference, CP 2015, Cork, Ireland, August 31 September 4, 2015, Proceedings, volume 9255 of Lecture Notes in Computer Science, pages 140–148. Springer, 2015. doi:10.1007/978-3-319-23219-5_10.
- [129] Steven Gay, Renaud Hartert, and Pierre Schaus. Simple and scalable time-table filtering for the cumulative constraint. In Gilles Pesant, editor, Principles and Practice of Constraint Programming 21st International Conference, CP 2015, Cork, Ireland, August 31 September 4, 2015, Proceedings, volume 9255 of Lecture Notes in Computer Science, pages 149–157. Springer, 2015. doi:10.1007/978-3-319-23219-5_11.
- [130] Steven Gay, Renaud Hartert, and Pierre Schaus. Time-table disjunctive reasoning for the cumulative constraint. In Laurent Michel, editor, Integration of AI and OR Techniques in Constraint Programming 12th International Conference, CPAIOR 2015, Barcelona, Spain, May 18-22, 2015, Proceedings, volume 9075 of Lecture Notes in Computer Science, pages 157–172. Springer, 2015. doi:10.1007/978-3-319-18008-3_11.
- [131] Steven Gay, Pierre Schaus, and Vivian De Smedt. Continuous casting scheduling with constraint programming. In Barry O'Sullivan, editor, Principles and Practice of Constraint Programming 20th International Conference, CP 2014, Lyon, France, September 8-12, 2014. Proceedings, volume 8656 of Lecture Notes in Computer Science, pages 831-845. Springer, 2014. doi:10.1007/978-3-319-10428-7_59.
- [132] Ridvan Gedik, Darshan Kalathia, Gokhan Egilmez, and Emre Kirac. A constraint programming approach for solving unrelated parallel machine scheduling problem. Comput. Ind. Eng., 121:139-149, 2018. URL: https://doi.org/10.1016/j.cie.2018.05.014, doi:10.1016/J.CIE.2018.05.014.

- [133] Tobias Geibinger, Lucas Kletzander, Matthias Krainz, Florian Mischek, Nysret Musliu, and Felix Winter. Physician scheduling during a pandemic. In Peter J. Stuckey, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 18th International Conference, CPAIOR 2021, Vienna, Austria, July 5-8, 2021, Proceedings, volume 12735 of Lecture Notes in Computer Science, pages 456-465. Springer, 2021. doi:10.1007/978-3-030-78230-6_29.
- [134] Tobias Geibinger, Florian Mischek, and Nysret Musliu. Investigating constraint programming and hybrid methods for real world industrial test laboratory scheduling. CoRR, abs/1911.04766, 2019. URL: http://arxiv.org/abs/1911.04766, arXiv:1911.04766.
- [135] Tobias Geibinger, Florian Mischek, and Nysret Musliu. Investigating constraint programming for real world industrial test laboratory scheduling. In Louis-Martin Rousseau and Kostas Stergiou, editors, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 16th International Conference, CPAIOR 2019, Thessaloniki, Greece, June 4-7, 2019, Proceedings, volume 11494 of Lecture Notes in Computer Science, pages 304–319. Springer, 2019. doi:10.1007/978-3-030-19212-9_20.
- [136] Tobias Geibinger, Florian Mischek, and Nysret Musliu. Constraint logic programming for real-world test laboratory scheduling. In *Thirty-Fifth AAAI Conference* on Artificial Intelligence, AAAI 2021, Thirty-Third Conference on Innovative Applications of Artificial Intelligence, IAAI 2021, The Eleventh Symposium on Educational Advances in Artificial Intelligence, EAAI 2021, Virtual Event, February 2-9, 2021, pages 6358-6366. AAAI Press, 2021. URL: https://doi.org/10.1609/aaai.v35i7.16789, doi:10.1609/AAAI.V35i7.16789.
- [137] Marc Geitz, Cristian Grozea, Wolfgang Steigerwald, Robin Stöhr, and Armin Wolf. Solving the extended job shop scheduling problem with agvs classical and quantum approaches. In Pierre Schaus, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 19th International Conference, CPAIOR 2022, Los Angeles, CA, USA, June 20-23, 2022, Proceedings, volume 13292 of Lecture Notes in Computer Science, pages 120–137. Springer, 2022. doi:10.1007/978-3-031-08011-1_10.
- [138] Mirco Gelain, Maria Silvia Pini, Francesca Rossi, Kristen Brent Venable, and Toby Walsh. A local search approach for incomplete soft constraint problems: Experimental results on meeting scheduling problems. In Domenico Salvagnin and Michele Lombardi, editors, Integration of AI and OR Techniques in Constraint Programming 14th International Conference, CPAIOR 2017, Padua, Italy, June 5-8, 2017, Proceedings, volume 10335 of Lecture Notes in Computer Science, pages 403–418. Springer, 2017. doi:10.1007/978-3-319-59776-8_32.
- [139] Ulrich Geske. Railway scheduling with declarative constraint programming. In Masanobu Umeda, Armin Wolf, Oskar Bartenstein, Ulrich Geske, Dietmar Seipel, and Osamu Takata, editors, Declarative Programming for Knowledge Management, 16th International Conference on Applications of Declarative Programming and Knowledge Management, INAP 2005, Fukuoka, Japan, October 22-24, 2005, Revised Selected Papers, volume 4369 of Lecture Notes in Computer Science, pages 117–134. Springer, 2005. doi:10.1007/11963578_10.
- [140] Katherine Giles and Willem-Jan van Hoeve. Solving a supply-delivery scheduling problem with constraint programming. In Michel Rueher, editor, Principles and Practice of Constraint Programming 22nd International Conference, CP 2016, Toulouse, France, September 5-9, 2016, Proceedings, volume 9892 of Lecture Notes in Computer Science, pages 602–617. Springer, 2016. doi:10.1007/978-3-319-44953-1_38.
- [141] Vincent Gingras and Claude-Guy Quimper. Generalizing the edge-finder rule for the cumulative constraint. In Subbarao Kambhampati, editor, *Proceedings of the Twenty-Fifth International Joint Conference on Artificial Intelligence, IJCAI 2016, New York, NY, USA, 9-15 July 2016*, pages 3103–3109. IJCAI/AAAI Press, 2016. URL: http://www.ijcai.org/Abstract/16/440.
- [142] Arthur Godet. Sur le tri de tâches pour résoudre des problèmes d'ordonnancement avec la programmation par contraintes. (On the use of tasks ordering to solve scheduling problems with constraint programming). PhD thesis, IMT Atlantique Bretagne Pays de la Loire, Brest, France, 2021. URL: https://tel.archives-ouvertes.fr/tel-03681868.

- [143] Arthur Godet, Xavier Lorca, Emmanuel Hebrard, and Gilles Simonin. Using approximation within constraint programming to solve the parallel machine scheduling problem with additional unit resources. In *The Thirty-Fourth AAAI Conference on Artificial Intelligence*, AAAI 2020, The Thirty-Second Innovative Applications of Artificial Intelligence Conference, IAAI 2020, The Tenth AAAI Symposium on Educational Advances in Artificial Intelligence, EAAI 2020, New York, NY, USA, February 7-12, 2020, pages 1512–1519. AAAI Press, 2020. URL: https://doi.org/10.1609/aaai.v34i02.5510, doi:10.1609/AAAI.V34I02.5510.
- [144] Vikas Goel, M. Slusky, Willem-Jan van Hoeve, Kevin C. Furman, and Yufen Shao. Constraint programming for LNG ship scheduling and inventory management. Eur. J. Oper. Res., 241(3):662-673, 2015. URL: https://doi.org/10.1016/j.ejor.2014.09.048, doi:10.1016/J.EJOR.2014.09.048.
- [145] Burak Gökgür, Brahim Hnich, and Selin Özpeynirci. Parallel machine scheduling with tool loading: a constraint programming approach. Int. J. Prod. Res., 56(16):5541–5557, 2018. doi:10.1080/00207543.2017.1421781.
- [146] Adrian Goldwaser and Andreas Schutt. Optimal torpedo scheduling. In J. Christopher Beck, editor, Principles and Practice of Constraint Programming 23rd International Conference, CP 2017, Melbourne, VIC, Australia, August 28 September 1, 2017, Proceedings, volume 10416 of Lecture Notes in Computer Science, pages 338–353. Springer, 2017. doi:10.1007/978-3-319-66158-2_22.
- [147] Hans-Joachim Goltz. Reducing domains for search in CLP(FD) and its application to job-shop scheduling. In Ugo Montanari and Francesca Rossi, editors, Principles and Practice of Constraint Programming CP'95, First International Conference, CP'95, Cassis, France, September 19-22, 1995, Proceedings, volume 976 of Lecture Notes in Computer Science, pages 549-562. Springer, 1995. doi:10.1007/3-540-60299-2_33.
- [148] Carla P. Gomes, Willem Jan van Hoeve, and Bart Selman. Constraint programming for distributed planning and scheduling. In *Distributed Plan and Schedule Management*, Papers from the 2006 AAAI Spring Symposium, Technical Report SS-06-04, Stanford, California, USA, March 27-29, 2006, pages 157-158. AAAI, 2006. URL: http://www.aaai.org/Library/Symposia/Spring/2006/ss06-04-024.php.
- [149] Diarmuid Grimes and Emmanuel Hebrard. Job shop scheduling with setup times and maximal time-lags: A simple constraint programming approach. In Andrea Lodi, Michela Milano, and Paolo Toth, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 7th International Conference, CPAIOR 2010, Bologna, Italy, June 14-18, 2010. Proceedings, volume 6140 of Lecture Notes in Computer Science, pages 147–161. Springer, 2010. doi:10.1007/978-3-642-13520-0_19.
- [150] Diarmuid Grimes and Emmanuel Hebrard. Models and strategies for variants of the job shop scheduling problem. In Jimmy Ho-Man Lee, editor, *Principles and Practice of Constraint Programming CP 2011 17th International Conference, CP 2011, Perugia, Italy, September 12-16, 2011. Proceedings*, volume 6876 of Lecture Notes in Computer Science, pages 356–372. Springer, 2011. doi:10.1007/978-3-642-23786-7_28.
- [151] Diarmuid Grimes, Emmanuel Hebrard, and Arnaud Malapert. Closing the open shop: Contradicting conventional wisdom. In Ian P. Gent, editor, Principles and Practice of Constraint Programming CP 2009, 15th International Conference, CP 2009, Lisbon, Portugal, September 20-24, 2009, Proceedings, volume 5732 of Lecture Notes in Computer Science, pages 400-408. Springer, 2009. doi:10.1007/978-3-642-04244-7_33.
- [152] Diarmuid Grimes, Georgiana Ifrim, Barry O'Sullivan, and Helmut Simonis. Analyzing the impact of electricity price forecasting on energy cost-aware scheduling. Sustain. Comput. Informatics Syst., 4(4):276–291, 2014. URL: https://doi.org/10.1016/j.suscom.2014.08.009, doi:10.1016/J.SUSCOM.2014.08.009.
- [153] Lucas Groleaz, Samba Ndojh Ndiaye, and Christine Solnon. ACO with automatic parameter selection for a scheduling problem with a group cumulative constraint. In Carlos Artemio Coello Coello, editor, GECCO '20: Genetic and Evolutionary Computation Conference, Cancún Mexico, July 8-12, 2020, pages 13-21. ACM, 2020. doi:10.1145/3377930.3389818.

- [154] Lucas Groleaz, Samba Ndojh Ndiaye, and Christine Solnon. Solving the group cumulative scheduling problem with CPO and ACO. In Helmut Simonis, editor, Principles and Practice of Constraint Programming 26th International Conference, CP 2020, Louvain-la-Neuve, Belgium, September 7-11, 2020, Proceedings, volume 12333 of Lecture Notes in Computer Science, pages 620-636. Springer, 2020. doi:10.1007/978-3-030-58475-7_36.
- [155] Flavius Gruian and Krzysztof Kuchcinski. Operation binding and scheduling for low power using constraint logic programming. In 24th EUROMICRO '98 Conference, Engineering Systems and Software for the Next Decade, 25-27 August 1998, Vesteras, Sweden, pages 10083–10090. IEEE Computer Society, 1998. doi:10.1109/EURMIC.1998.711781.
- [156] Hanyu Gu, Andreas Schutt, and Peter J. Stuckey. A lagrangian relaxation based forward-backward improvement heuristic for maximising the net present value of resource-constrained projects. In Carla P. Gomes and Meinolf Sellmann, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 10th International Conference, CPAIOR 2013, Yorktown Heights, NY, USA, May 18-22, 2013. Proceedings, volume 7874 of Lecture Notes in Computer Science, pages 340-346. Springer, 2013. doi:10.1007/978-3-642-38171-3_24.
- [157] Seyda Gür, Mehmet Pinarbasi, Haci Mehmet Alakas, and Tamer Eren. Operating room scheduling with surgical team: a new approach with constraint programming and goal programming. Central Eur. J. Oper. Res., 31(4):1061–1085, 2023. URL: https://doi.org/10.1007/s10100-022-00835-z, doi:10.1007/s10100-022-00835-Z.
- [158] Nizar El Hachemi, Michel Gendreau, and Louis-Martin Rousseau. A hybrid constraint programming approach to the log-truck scheduling problem. *Ann. Oper. Res.*, 184(1):163–178, 2011. URL: https://doi.org/10.1007/s10479-010-0698-x, doi:10.1007/S10479-010-0698-X.
- [159] Claire Hanen, Alix Munier Kordon, and Theo Pedersen. Two deadline reduction algorithms for scheduling dependent tasks on parallel processors. In Peter J. Stuckey, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 18th International Conference, CPAIOR 2021, Vienna, Austria, July 5-8, 2021, Proceedings, volume 12735 of Lecture Notes in Computer Science, pages 214–230. Springer, 2021. doi:10.1007/978-3-030-78230-6_14.
- [160] Viktoria A. Hauder, Andreas Beham, Sebastian Raggl, Sophie N. Parragh, and Michael Affenzeller. On constraint programming for a new flexible project scheduling problem with resource constraints. CoRR, abs/1902.09244, 2019. URL: http://arxiv.org/abs/1902.09244, arXiv:1902.09244.
- [161] Shan He, Mark Wallace, Graeme Gange, Ariel Liebman, and Campbell Wilson. A fast and scalable algorithm for scheduling large numbers of devices under real-time pricing. In John N. Hooker, editor, *Principles and Practice of Constraint Programming 24th International Conference*, *CP 2018*, *Lille, France*, *August 27-31*, 2018, *Proceedings*, volume 11008 of *Lecture Notes in Computer Science*, pages 649–666. Springer, 2018. doi:10.1007/978-3-319-98334-9_42.
- [162] Emmanuel Hebrard, Paul Tyler, and Toby Walsh. Computing super-schedules. In Peter van Beek, editor, Principles and Practice of Constraint Programming CP 2005, 11th International Conference, CP 2005, Sitges, Spain, October 1-5, 2005, Proceedings, volume 3709 of Lecture Notes in Computer Science, pages 879–879. Springer, 2005. doi:10.1007/11564751_117.
- [163] Aliza R. Heching and John N. Hooker. Scheduling home hospice care with logic-based benders decomposition. In Claude-Guy Quimper, editor, Integration of AI and OR Techniques in Constraint Programming 13th International Conference, CPAIOR 2016, Banff, AB, Canada, May 29 June 1, 2016, Proceedings, volume 9676 of Lecture Notes in Computer Science, pages 187–197. Springer, 2016. doi:10.1007/978-3-319-33954-2_14.
- [164] Stefan Heinz and J. Christopher Beck. Reconsidering mixed integer programming and mip-based hybrids for scheduling. In Nicolas Beldiceanu, Narendra Jussien, and Eric Pinson, editors, Integration of AI and OR Techniques in Contraint Programming for Combinatorial Optimization Problems 9th International Conference, CPAIOR 2012, Nantes, France, May 28 June 1, 2012. Proceedings, volume 7298 of Lecture Notes in Computer Science, pages 211–227. Springer, 2012. doi:10.1007/978-3-642-29828-8\14.

- [165] Stefan Heinz, Wen-Yang Ku, and J. Christopher Beck. Recent improvements using constraint integer programming for resource allocation and scheduling. In Carla P. Gomes and Meinolf Sellmann, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 10th International Conference, CPAIOR 2013, Yorktown Heights, NY, USA, May 18-22, 2013. Proceedings, volume 7874 of Lecture Notes in Computer Science, pages 12–27. Springer, 2013. doi:10.1007/978-3-642-38171-3_2.
- [166] Stefan Heinz, Thomas Schlechte, Rüdiger Stephan, and Michael Winkler. Solving steel mill slab design problems. Constraints An Int. J., 17(1):39–50, 2012. URL: https://doi.org/10.1007/s10601-011-9113-8, doi:10.1007/s10601-011-9113-8.
- [167] Stefan Heinz and Jens Schulz. Explanations for the cumulative constraint: An experimental study. In Panos M. Pardalos and Steffen Rebennack, editors, Experimental Algorithms 10th International Symposium, SEA 2011, Kolimpari, Chania, Crete, Greece, May 5-7, 2011. Proceedings, volume 6630 of Lecture Notes in Computer Science, pages 400–409. Springer, 2011. doi:10.1007/978-3-642-20662-7_34.
- [168] Stefan Heinz, Jens Schulz, and J. Christopher Beck. Using dual presolving reductions to reformulate cumulative constraints. Constraints An Int. J., 18(2):166–201, 2013. URL: https://doi.org/10.1007/s10601-012-9136-9, doi:10.1007/S10601-012-9136-9.
- [169] Vilém Heinz, Antonín Novák, Marek Vlk, and Zdenek Hanzálek. Constraint programming and constructive heuristics for parallel machine scheduling with sequence-dependent setups and common servers. Comput. Ind. Eng., 172(Part):108586, 2022. URL: https://doi.org/10.1016/j.cie.2022.108586, doi: 10.1016/J.CIE.2022.108586.
- [170] Vilém Heinz, Antonín Novák, Marek Vlk, and Zdenek Hanzálek. Constraint programming and constructive heuristics for parallel machine scheduling with sequence-dependent setups and common servers. CoRR, abs/2305.19888, 2023. URL: https://doi.org/10.48550/arXiv.2305.19888, arXiv:2305.19888, doi:10.48550/ARXIV.2305.19888.
- [171] Susanne Heipcke, Yves Colombani, Cristina C. B. Cavalcante, and Cid C. de Souza. Scheduling under labour resource constraints. Constraints An Int. J., 5(4):415–422, 2000. doi:10.1023/A:1009860311452.
- [172] Pascal Van Hentenryck and Laurent Michel. Scheduling abstractions for local search. In Jean-Charles Régin and Michel Rueher, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, First International Conference, CPAIOR 2004, Nice, France, April 20-22, 2004, Proceedings, volume 3011 of Lecture Notes in Computer Science, pages 319-334. Springer, 2004. doi:10.1007/978-3-540-24664-0_22.
- [173] Pascal Van Hentenryck and Laurent Michel. The steel mill slab design problem revisited. In Laurent Perron and Michael A. Trick, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 5th International Conference, CPAIOR 2008, Paris, France, May 20-23, 2008, Proceedings, volume 5015 of Lecture Notes in Computer Science, pages 377–381. Springer, 2008. doi:10.1007/978-3-540-68155-7_41.
- [174] Fabien Hermenier, Sophie Demassey, and Xavier Lorca. Bin repacking scheduling in virtualized datacenters. In Jimmy Ho-Man Lee, editor, *Principles and Practice of Constraint Programming CP 2011 17th International Conference, CP 2011, Perugia, Italy, September 12-16, 2011. Proceedings*, volume 6876 of *Lecture Notes in Computer Science*, pages 27–41. Springer, 2011. doi:10.1007/978-3-642-23786-7_5.
- [175] Alessandro Hill, Jordan Ticktin, and Thomas W. M. Vossen. A computational study of constraint programming approaches for resource-constrained project scheduling with autonomous learning effects. In Peter J. Stuckey, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 18th International Conference, CPAIOR 2021, Vienna, Austria, July 5-8, 2021, Proceedings, volume 12735 of Lecture Notes in Computer Science, pages 26–44. Springer, 2021. doi:10.1007/978-3-030-78230-6_2.

- [176] Te-Wei Ho, Jia-Sheng Yao, Yao-Ting Chang, Feipei Lai, Jui-Fen Lai, Sue-Min Chu, Wan-Chung Liao, and Han-Mo Chiu. A platform for dynamic optimal nurse scheduling based on integer linear programming along with multiple criteria constraints. In *Proceedings of the 2018 Artificial Intelligence and Cloud Computing Conference*, AICCC 2018, Tokyo, Japan, December 21-23, 2018, pages 145-150. ACM, 2018. doi:10.1145/3299819.3299825.
- [177] John N. Hooker. A hybrid method for planning and scheduling. In Mark Wallace, editor, Principles and Practice of Constraint Programming CP 2004, 10th International Conference, CP 2004, Toronto, Canada, September 27 October 1, 2004, Proceedings, volume 3258 of Lecture Notes in Computer Science, pages 305–316. Springer, 2004. doi:10.1007/978-3-540-30201-8_24.
- [178] John N. Hooker. A hybrid method for the planning and scheduling. Constraints An Int. J., 10(4):385-401, 2005. URL: https://doi.org/10.1007/s10601-005-2812-2, doi:10.1007/S10601-005-2812-2.
- [179] John N. Hooker. Planning and scheduling to minimize tardiness. In Peter van Beek, editor, Principles and Practice of Constraint Programming CP 2005, 11th International Conference, CP 2005, Sitges, Spain, October 1-5, 2005, Proceedings, volume 3709 of Lecture Notes in Computer Science, pages 314–327. Springer, 2005. doi:10.1007/11564751_25.
- [180] John N. Hooker. An integrated method for planning and scheduling to minimize tardiness. Constraints An Int. J., 11(2-3):139–157, 2006. URL: https://doi.org/10.1007/s10601-006-8060-2, doi:10.1007/s10601-006-8060-2.
- [181] John N. Hooker. Job sequencing bounds from decision diagrams. In J. Christopher Beck, editor, Principles and Practice of Constraint Programming 23rd International Conference, CP 2017, Melbourne, VIC, Australia, August 28 September 1, 2017, Proceedings, volume 10416 of Lecture Notes in Computer Science, pages 565–578. Springer, 2017. doi:10.1007/978-3-319-66158-2_36.
- [182] John N. Hooker and Hong Yan. A relaxation of the cumulative constraint. In Pascal Van Hentenryck, editor, *Principles and Practice of Constraint Programming CP 2002, 8th International Conference, CP 2002, Ithaca, NY, USA, September 9-13, 2002, Proceedings*, volume 2470 of *Lecture Notes in Computer Science*, pages 686–690. Springer, 2002. doi:10.1007/3-540-46135-3_46.
- [183] Vinasétan Ratheil Houndji, Pierre Schaus, Laurence A. Wolsey, and Yves Deville. The stockingcost constraint. In Barry O'Sullivan, editor, Principles and Practice of Constraint Programming 20th International Conference, CP 2014, Lyon, France, September 8-12, 2014. Proceedings, volume 8656 of Lecture Notes in Computer Science, pages 382-397. Springer, 2014. doi:10.1007/978-3-319-10428-7_29.
- [184] Felix Hübner, Patrick Gerhards, Christian Stürck, and Rebekka Volk. Solving the nuclear dismantling project scheduling problem by combining mixed-integer and constraint programming techniques and metaheuristics. J. Sched., 24(3):269–290, 2021. URL: https://doi.org/10.1007/s10951-021-00682-x, doi: 10.1007/s10951-021-00682-x.
- [185] Georgiana Ifrim, Barry O'Sullivan, and Helmut Simonis. Properties of energy-price forecasts for scheduling. In Michela Milano, editor, Principles and Practice of Constraint Programming 18th International Conference, CP 2012, Québec City, QC, Canada, October 8-12, 2012. Proceedings, volume 7514 of Lecture Notes in Computer Science, pages 957-972. Springer, 2012. doi:10.1007/978-3-642-33558-7_68.
- [186] Eyüp Ensar Isik, Seyda Topaloglu Yildiz, and Özge Satir Akpunar. Constraint programming models for the hybrid flow shop scheduling problem and its extensions. Soft Comput., 27(24):18623–18650, 2023. URL: https://doi.org/10.1007/s00500-023-09086-9, doi:10.1007/s00500-023-09086-9.
- [187] Jean Jourdan, François Fages, Didier Rozzonelli, and Alain Demeure. Data alignment and task scheduling on parallel machines using concurrent constraint model-based programming. In Maurice Bruynooghe, editor, Logic Programming, Proceedings of the 1994 International Symposium, Ithaca, New York, USA, November 13-17, 1994, page 678. MIT Press, 1994.

- [188] Carla Juvin, Emmanuel Hebrard, Laurent Houssin, and Pierre Lopez. An efficient constraint programming approach to preemptive job shop scheduling. In Roland H. C. Yap, editor, 29th International Conference on Principles and Practice of Constraint Programming, CP 2023, August 27-31, 2023, Toronto, Canada, volume 280 of LIPIcs, pages 19:1–19:16. Schloss Dagstuhl Leibniz-Zentrum für Informatik, 2023. URL: https://doi.org/10.4230/LIPIcs.CP.2023.19, doi:10.4230/LIPICS.CP.2023.19.
- [189] Carla Juvin, Laurent Houssin, and Pierre Lopez. Constraint programming for the robust two-machine flow-shop scheduling problem with budgeted uncertainty. In André A. Ciré, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 20th International Conference, CPAIOR 2023, Nice, France, May 29 June 1, 2023, Proceedings, volume 13884 of Lecture Notes in Computer Science, pages 354–369. Springer, 2023. doi:10.1007/978-3-031-33271-5_23.
- [190] Olli Kamarainen and Hani El Sakkout. Local probing applied to scheduling. In Pascal Van Hentenryck, editor, Principles and Practice of Constraint Programming CP 2002, 8th International Conference, CP 2002, Ithaca, NY, USA, September 9-13, 2002, Proceedings, volume 2470 of Lecture Notes in Computer Science, pages 155–171. Springer, 2002. doi:10.1007/3-540-46135-3_11.
- [191] Roger Kameugne. Propagation techniques of resource constraint for cumulative scheduling. Constraints An Int. J., 20(4):506-507, 2015. URL: https://doi.org/10.1007/s10601-015-9227-5, doi:10.1007/s10601-015-9227-5.
- [192] Roger Kameugne, Sévérine Betmbe Fetgo, Vincent Gingras, Yanick Ouellet, and Claude-Guy Quimper. Horizontally elastic not-first/not-last filtering algorithm for cumulative resource constraint. In Willem Jan van Hoeve, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 15th International Conference, CPAIOR 2018, Delft, The Netherlands, June 26-29, 2018, Proceedings, volume 10848 of Lecture Notes in Computer Science, pages 316-332. Springer, 2018. doi:10.1007/978-3-319-93031-2_23.
- [193] Roger Kameugne, Sévérine Betmbe Fetgo, Thierry Noulamo, and Clémentin Tayou Djamégni. Horizontally elastic edge finder rule for cumulative constraint based on slack and density. In Roland H. C. Yap, editor, 29th International Conference on Principles and Practice of Constraint Programming, CP 2023, August 27-31, 2023, Toronto, Canada, volume 280 of LIPIcs, pages 20:1–20:17. Schloss Dagstuhl Leibniz-Zentrum für Informatik, 2023. URL: https://doi.org/10.4230/LIPIcs.CP.2023.20, doi:10.4230/LIPICS.CP.2023.20.
- [194] Roger Kameugne, Laure Pauline Fotso, Joseph D. Scott, and Youcheu Ngo-Kateu. A quadratic edge-finding filtering algorithm for cumulative resource constraints. In Jimmy Ho-Man Lee, editor, *Principles and Practice of Constraint Programming CP 2011 17th International Conference, CP 2011, Perugia, Italy, September 12-16, 2011. Proceedings*, volume 6876 of *Lecture Notes in Computer Science*, pages 478–492. Springer, 2011. doi:10.1007/978-3-642-23786-7_37.
- [195] Roger Kameugne, Laure Pauline Fotso, Joseph D. Scott, and Youcheu Ngo-Kateu. A quadratic edge-finding filtering algorithm for cumulative resource constraints. Constraints An Int. J., 19(3):243–269, 2014. URL: https://doi.org/10.1007/s10601-013-9157-z, doi:10.1007/s10601-013-9157-z.
- [196] John J. Kanet, Sanjay Ahire, and Michael F. Gorman. Constraint programming for scheduling. In Joseph Y.-T. Leung, editor, *Handbook of Scheduling Algorithms, Models, and Performance Analysis*. Chapman and Hall/CRC, 2004. URL: http://www.crcnetbase.com/doi/abs/10.1201/9780203489802.ch47, doi:10.1201/9780203489802.CH47.
- [197] Elena Kelareva, Kevin Tierney, and Philip Kilby. CP methods for scheduling and routing with time-dependent task costs. In Carla P. Gomes and Meinolf Sellmann, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 10th International Conference, CPAIOR 2013, Yorktown Heights, NY, USA, May 18-22, 2013. Proceedings, volume 7874 of Lecture Notes in Computer Science, pages 111–127. Springer, 2013. doi:10.1007/978-3-642-38171-3_8.

- [198] Jan Kelbel and Zdenek Hanzálek. Solving production scheduling with earliness/tardiness penalties by constraint programming. J. Intell. Manuf., 22(4):553–562, 2011. URL: https://doi.org/10.1007/s10845-009-0318-2, doi:10.1007/S10845-009-0318-2.
- [199] András Kéri and Tamás Kis. Computing tight time windows for RCPSPWET with the primal-dual method. In Pascal Van Hentenryck and Laurence A. Wolsey, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 4th International Conference, CPAIOR 2007, Brussels, Belgium, May 23-26, 2007, Proceedings, volume 4510 of Lecture Notes in Computer Science, pages 127–140. Springer, 2007. doi: 10.1007/978-3-540-72397-4_10.
- [200] Ghada El Khayat, André Langevin, and Diane Riopel. Integrated production and material handling scheduling using mathematical programming and constraint programming. Eur. J. Oper. Res., 175(3):1818–1832, 2006. URL: https://doi.org/10.1016/j.ejor.2005.02.077, doi:10.1016/J.EJOR.2005.02.077.
- [201] Mohand Ou Idir Khemmoudj, Marc Porcheron, and Hachemi Bennaceur. When constraint programming and local search solve the scheduling problem of electricité de france nuclear power plant outages. In Frédéric Benhamou, editor, Principles and Practice of Constraint Programming CP 2006, 12th International Conference, CP 2006, Nantes, France, September 25-29, 2006, Proceedings, volume 4204 of Lecture Notes in Computer Science, pages 271–283. Springer, 2006. doi:10.1007/11889205_21.
- [202] Dongyun Kim, Yeonjun Choi, Kyungduk Moon, Myungho Lee, Kangbok Lee, and Michael L. Pinedo. Iterated greedy constraint programming for scheduling steel-making continuous casting. In André A. Ciré, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 20th International Conference, CPAIOR 2023, Nice, France, May 29 June 1, 2023, Proceedings, volume 13884 of Lecture Notes in Computer Science, pages 477–492. Springer, 2023. doi:10.1007/978-3-031-33271-5_31.
- [203] Christian Klanke, Dominik R. Bleidorn, Vassilios Yfantis, and Sebastian Engell. Combining constraint programming and temporal decomposition approaches scheduling of an industrial formulation plant. In Peter J. Stuckey, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 18th International Conference, CPAIOR 2021, Vienna, Austria, July 5-8, 2021, Proceedings, volume 12735 of Lecture Notes in Computer Science, pages 133–148. Springer, 2021. doi:10.1007/978-3-030-78230-6_9.
- [204] Lucas Kletzander and Nysret Musliu. A multi-stage simulated annealing algorithm for the torpedo scheduling problem. In Domenico Salvagnin and Michele Lombardi, editors, Integration of AI and OR Techniques in Constraint Programming 14th International Conference, CPAIOR 2017, Padua, Italy, June 5-8, 2017, Proceedings, volume 10335 of Lecture Notes in Computer Science, pages 344–358. Springer, 2017. doi:10.1007/978-3-319-59776-8_28.
- [205] Jana Koehler, Josef Bürgler, Urs Fontana, Etienne Fux, Florian A. Herzog, Marc Pouly, Sophia Saller, Anastasia Salyaeva, Peter Scheiblechner, and Kai Waelti. Cable tree wiring benchmarking solvers on a real-world scheduling problem with a variety of precedence constraints. Constraints An Int. J., 26(1):56–106, 2021. URL: https://doi.org/10.1007/s10601-021-09321-w, doi:10.1007/S10601-021-09321-W.
- [206] Ouajdi Korbaa, Pascal Yim, and Jean-Claude Gentina. Solving transient scheduling problem for cyclic production using timed petri nets and constraint programming. In 5th European Control Conference, ECC 1999, Karlsruhe, Germany, August 31 September 3, 1999, pages 3938–3945. IEEE, 1999. doi:10.23919/ECC.1999.7099947.
- [207] Ouajdi Korbaa, Pascal Yim, and Jean-Claude Gentina. Solving transient scheduling problems with constraint programming. Eur. J. Control, 6(6):511–520, 2000. doi:10.1016/S0947-3580(00)71113-7.
- [208] Sebastian Kosch and J. Christopher Beck. A new MIP model for parallel-batch scheduling with non-identical job sizes. In Helmut Simonis, editor, Integration of AI and OR Techniques in Constraint Programming 11th International Conference, CPAIOR 2014, Cork, Ireland, May 19-23, 2014. Proceedings, volume 8451 of Lecture Notes in Computer Science, pages 55-70. Springer, 2014. doi:10.1007/978-3-319-07046-9_5.

- [209] András Kovács and J. Christopher Beck. A global constraint for total weighted completion time for cumulative resources. Eng. Appl. Artif. Intell., 21(5):691-697, 2008. URL: https://doi.org/10.1016/j.engappai.2008.03.004, doi:10.1016/J.ENGAPPAI.2008.03.004.
- [210] András Kovács and J. Christopher Beck. A global constraint for total weighted completion time for unary resources. Constraints An Int. J., 16(1):100–123, 2011. URL: https://doi.org/10.1007/s10601-009-9088-x, doi:10.1007/s10601-009-9088-x.
- [211] András Kovács, Péter Egri, Tamás Kis, and József Váncza. Proterv-ii: An integrated production planning and scheduling system. In Peter van Beek, editor, Principles and Practice of Constraint Programming CP 2005, 11th International Conference, CP 2005, Sitges, Spain, October 1-5, 2005, Proceedings, volume 3709 of Lecture Notes in Computer Science, pages 880–880. Springer, 2005. doi:10.1007/11564751_118.
- [212] András Kovács and Tamás Kis. Constraint programming approach to a bilevel scheduling problem. Constraints An Int. J., 16(3):317–340, 2011. URL: https://doi.org/10.1007/s10601-010-9102-3, doi:10.1007/s10601-010-9102-3.
- [213] András Kovács and József Váncza. Completable partial solutions in constraint programming and constraint-based scheduling. In Mark Wallace, editor, Principles and Practice of Constraint Programming CP 2004, 10th International Conference, CP 2004, Toronto, Canada, September 27 October 1, 2004, Proceedings, volume 3258 of Lecture Notes in Computer Science, pages 332–346. Springer, 2004. doi:10.1007/978-3-540-30201-8_26.
- [214] András Kovács and József Váncza. Progressive solutions: A simple but efficient dominance rule for practical RCPSP. In J. Christopher Beck and Barbara M. Smith, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, Third International Conference, CPAIOR 2006, Cork, Ireland, May 31 June 2, 2006, Proceedings, volume 3990 of Lecture Notes in Computer Science, pages 139–151. Springer, 2006. doi: 10.1007/11757375_13.
- [215] Benjamin Kovács, Pierre Tassel, Wolfgang Kohlenbrein, Philipp Schrott-Kostwein, and Martin Gebser. Utilizing constraint optimization for industrial machine workload balancing. In Laurent D. Michel, editor, 27th International Conference on Principles and Practice of Constraint Programming, CP 2021, Montpellier, France (Virtual Conference), October 25-29, 2021, volume 210 of LIPIcs, pages 36:1–36:17. Schloss Dagstuhl Leibniz-Zentrum für Informatik, 2021. URL: https://doi.org/10.4230/LIPIcs.CP.2021.36, doi:10.4230/LIPICS.CP.2021.36.
- [216] Stefan Kreter, Andreas Schutt, and Peter J. Stuckey. Modeling and solving project scheduling with calendars. In Gilles Pesant, editor, Principles and Practice of Constraint Programming 21st International Conference, CP 2015, Cork, Ireland, August 31 September 4, 2015, Proceedings, volume 9255 of Lecture Notes in Computer Science, pages 262–278. Springer, 2015. doi:10.1007/978-3-319-23219-5_19.
- [217] Stefan Kreter, Andreas Schutt, and Peter J. Stuckey. Using constraint programming for solving rcpsp/max-cal. Constraints An Int. J., 22(3):432–462, 2017. URL: https://doi.org/10.1007/s10601-016-9266-6, doi:10.1007/S10601-016-9266-6.
- [218] Krzysztof Kuchcinski and Christophe Wolinski. Global approach to assignment and scheduling of complex behaviors based on HCDG and constraint programming. J. Syst. Archit., 49(12-15):489–503, 2003. doi:10.1016/S1383-7621(03)00075-4.
- [219] T. K. Satish Kumar. Incremental computation of resource-envelopes in producer-consumer models. In Francesca Rossi, editor, *Principles and Practice of Constraint Programming CP 2003, 9th International Conference, CP 2003, Kinsale, Ireland, September 29 October 3, 2003, Proceedings*, volume 2833 of Lecture Notes in Computer Science, pages 664–678. Springer, 2003. doi:10.1007/978-3-540-45193-8_45.
- [220] Philippe Laborie. IBM ILOG CP optimizer for detailed scheduling illustrated on three problems. In Willem Jan van Hoeve and John N. Hooker, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 6th International Conference, CPAIOR 2009, Pittsburgh, PA, USA, May 27-31, 2009, Proceedings, volume 5547 of Lecture Notes in Computer Science, pages 148-162. Springer, 2009. doi:10.1007/978-3-642-01929-6_12.

- [221] Philippe Laborie. An update on the comparison of mip, CP and hybrid approaches for mixed resource allocation and scheduling. In Willem Jan van Hoeve, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 15th International Conference, CPAIOR 2018, Delft, The Netherlands, June 26-29, 2018, Proceedings, volume 10848 of Lecture Notes in Computer Science, pages 403-411. Springer, 2018. doi:10.1007/978-3-319-93031-2_29.
- [222] Philippe Laborie, Jerome Rogerie, Paul Shaw, and Petr Vilím. IBM ILOG CP optimizer for scheduling 20+ years of scheduling with constraints at IBM/ILOG. Constraints An Int. J., 23(2):210-250, 2018. URL: https://doi.org/10.1007/s10601-018-9281-x, doi:10.1007/S10601-018-9281-X.
- [223] Marie-Louise Lackner, Christoph Mrkvicka, Nysret Musliu, Daniel Walkiewicz, and Felix Winter. Minimizing cumulative batch processing time for an industrial oven scheduling problem. In Laurent D. Michel, editor, 27th International Conference on Principles and Practice of Constraint Programming, CP 2021, Montpellier, France (Virtual Conference), October 25-29, 2021, volume 210 of LIPIcs, pages 37:1–37:18. Schloss Dagstuhl Leibniz-Zentrum für Informatik, 2021. URL: https://doi.org/10.4230/LIPIcs.CP.2021.37, doi:10.4230/LIPICS.CP.2021.37.
- [224] Marie-Louise Lackner, Christoph Mrkvicka, Nysret Musliu, Daniel Walkiewicz, and Felix Winter. Exact methods for the oven scheduling problem. Constraints An Int. J., 28(2):320–361, 2023. URL: https://doi.org/10.1007/s10601-023-09347-2, doi:10.1007/s10601-023-09347-2.
- [225] Asma Lahimer, Pierre Lopez, and Mohamed Haouari. Climbing depth-bounded adjacent discrepancy search for solving hybrid flow shop scheduling problems with multiprocessor tasks. In Tobias Achterberg and J. Christopher Beck, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems 8th International Conference, CPAIOR 2011, Berlin, Germany, May 23-27, 2011. Proceedings, volume 6697 of Lecture Notes in Computer Science, pages 117–130. Springer, 2011. doi:10.1007/978-3-642-21311-3_12.
- [226] Hoong Chuin Lau, Kong Wei Lye, and Viet Bang Nguyen. A combinatorial auction framework for solving decentralized scheduling problems (extended abstract). In Laurent Perron and Michael A. Trick, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 5th International Conference, CPAIOR 2008, Paris, France, May 20-23, 2008, Proceedings, volume 5015 of Lecture Notes in Computer Science, pages 333–337. Springer, 2008. doi:10.1007/978-3-540-68155-7_33.
- [227] Colin J. Layfield. A constraint programming pre-processor for duty scheduling. PhD thesis, University of Leeds, UK, 2002. URL: http://etheses.whiterose.ac.uk/1301/.
- [228] Arnaud Letort, Nicolas Beldiceanu, and Mats Carlsson. A scalable sweep algorithm for the cumulative constraint. In Michela Milano, editor, Principles and Practice of Constraint Programming 18th International Conference, CP 2012, Québec City, QC, Canada, October 8-12, 2012. Proceedings, volume 7514 of Lecture Notes in Computer Science, pages 439-454. Springer, 2012. doi:10.1007/978-3-642-33558-7_33.
- [229] Arnaud Letort, Mats Carlsson, and Nicolas Beldiceanu. A synchronized sweep algorithm for the k-dimensional cumulative constraint. In Carla P. Gomes and Meinolf Sellmann, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 10th International Conference, CPAIOR 2013, Yorktown Heights, NY, USA, May 18-22, 2013. Proceedings, volume 7874 of Lecture Notes in Computer Science, pages 144–159. Springer, 2013. doi:10.1007/978-3-642-38171-3_10.
- [230] Arnaud Letort, Mats Carlsson, and Nicolas Beldiceanu. Synchronized sweep algorithms for scalable scheduling constraints. Constraints An Int. J., 20(2):183–234, 2015. URL: https://doi.org/10.1007/s10601-014-9172-8, doi:10.1007/S10601-014-9172-8.
- [231] Xingyang Li, Jun Fu, Zixi Jia, Ziyan Zhao, Siyi Li, and Shixin Liu. Constraint programming for a novel integrated optimization of blocking job shop scheduling and variable-speed transfer robot assignment. In *IEEE International Conference on Networking*, Sensing and Control, ICNSC 2022, Shanghai, China, December 15-18, 2022, pages 1–6. IEEE, 2022. doi:10.1109/ICNSC55942.2022.10004158.

- [232] Olivier Liess and Philippe Michelon. A constraint programming approach for the resource-constrained project scheduling problem. Ann. Oper. Res., 157(1):25–36, 2008. URL: https://doi.org/10.1007/s10479-007-0188-y, doi:10.1007/S10479-007-0188-Y.
- [233] Andrew Lim, Brian Rodrigues, and Zhou Xu. Solving the crane scheduling problem using intelligent search schemes. In Mark Wallace, editor, Principles and Practice of Constraint Programming CP 2004, 10th International Conference, CP 2004, Toronto, Canada, September 27 October 1, 2004, Proceedings, volume 3258 of Lecture Notes in Computer Science, pages 747–751. Springer, 2004. doi:10.1007/978-3-540-30201-8_59.
- [234] BoonPing Lim, Hassan L. Hijazi, Sylvie Thiébaux, and Menkes van den Briel. Online hvac-aware occupancy scheduling with adaptive temperature control. In Michel Rueher, editor, Principles and Practice of Constraint Programming 22nd International Conference, CP 2016, Toulouse, France, September 5-9, 2016, Proceedings, volume 9892 of Lecture Notes in Computer Science, pages 683-700. Springer, 2016. doi:10.1007/978-3-319-44953-1_43.
- [235] BoonPing Lim, Menkes van den Briel, Sylvie Thiébaux, Russell Bent, and Scott Backhaus. Large neighborhood search for energy aware meeting scheduling in smart buildings. In Laurent Michel, editor, Integration of AI and OR Techniques in Constraint Programming 12th International Conference, CPAIOR 2015, Barcelona, Spain, May 18-22, 2015, Proceedings, volume 9075 of Lecture Notes in Computer Science, pages 240-254. Springer, 2015. doi:10.1007/978-3-319-18008-3_17.
- [236] Kamol Limtanyakul. Scheduling of tests on vehicle prototypes using constraint and integer programming. In Jörg Kalcsics and Stefan Nickel, editors, Operations Research, Proceedings 2007, Selected Papers of the Annual International Conference of the German Operations Research Society (GOR), Saarbrücken, Germany, September 5-7, 2007, Operations Research Proceedings, pages 421–426. Springer, 2007. doi:10.1007/978-3-540-77903-2_65.
- [237] Kamol Limtanyakul and Uwe Schwiegelshohn. Improvements of constraint programming and hybrid methods for scheduling of tests on vehicle prototypes. Constraints An Int. J., 17(2):172–203, 2012. URL: https://doi.org/10.1007/s10601-012-9118-y, doi:10.1007/s10601-012-9118-y.
- [238] Ke Liu, Sven Löffler, and Petra Hofstedt. Solving the talent scheduling problem by parallel constraint programming. In John MacIntyre, Ilias Maglogiannis, Lazaros S. Iliadis, and Elias Pimenidis, editors, Artificial Intelligence Applications and Innovations 15th IFIP WG 12.5 International Conference, AIAI 2019, Hersonissos, Crete, Greece, May 24-26, 2019, Proceedings, volume 559 of IFIP Advances in Information and Communication Technology, pages 236–244. Springer, 2019. doi:10.1007/978-3-030-19823-7_19.
- [239] Tong Liu, Roberto Di Cosmo, Maurizio Gabbrielli, and Jacopo Mauro. Nightsplitter: A scheduling tool to optimize (sub)group activities. In J. Christopher Beck, editor, Principles and Practice of Constraint Programming 23rd International Conference, CP 2017, Melbourne, VIC, Australia, August 28 September 1, 2017, Proceedings, volume 10416 of Lecture Notes in Computer Science, pages 370–386. Springer, 2017. doi:10.1007/978-3-319-66158-2_24.
- [240] Yuechang Liu and Yunfei Jiang. LP-TPOP: integrating planning and scheduling through constraint programming. In Qiang Yang and Geoffrey I. Webb, editors, PRICAI 2006: Trends in Artificial Intelligence, 9th Pacific Rim International Conference on Artificial Intelligence, Guilin, China, August 7-11, 2006, Proceedings, volume 4099 of Lecture Notes in Computer Science, pages 844–848. Springer, 2006. doi:10.1007/11801603_92.
- [241] Michele Lombardi, Alessio Bonfietti, and Michela Milano. Deterministic estimation of the expected makespan of a POS under duration uncertainty. In Gilles Pesant, editor, Principles and Practice of Constraint Programming 21st International Conference, CP 2015, Cork, Ireland, August 31 September 4, 2015, Proceedings, volume 9255 of Lecture Notes in Computer Science, pages 279–294. Springer, 2015. doi:10.1007/978-3-319-23219-5_20.
- [242] Michele Lombardi, Alessio Bonfietti, Michela Milano, and Luca Benini. Precedence constraint posting for cyclic scheduling problems. In Tobias Achterberg and J. Christopher Beck, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems 8th International Conference, CPAIOR 2011, Berlin, Germany, May 23-27, 2011. Proceedings, volume 6697 of Lecture Notes in Computer Science, pages 137–153. Springer, 2011. doi:10.1007/978-3-642-21311-3_14.

- [243] Michele Lombardi and Michela Milano. A precedence constraint posting approach for the RCPSP with time lags and variable durations. In Ian P. Gent, editor, Principles and Practice of Constraint Programming CP 2009, 15th International Conference, CP 2009, Lisbon, Portugal, September 20-24, 2009, Proceedings, volume 5732 of Lecture Notes in Computer Science, pages 569–583. Springer, 2009. doi:10.1007/978-3-642-04244-7_45.
- [244] Michele Lombardi and Michela Milano. Constraint based scheduling to deal with uncertain durations and self-timed execution. In David Cohen, editor, Principles and Practice of Constraint Programming CP 2010 16th International Conference, CP 2010, St. Andrews, Scotland, UK, September 6-10, 2010. Proceedings, volume 6308 of Lecture Notes in Computer Science, pages 383–397. Springer, 2010. doi:10.1007/978-3-642-15396-9_32.
- [245] Michele Lombardi and Michela Milano. Optimal methods for resource allocation and scheduling: a cross-disciplinary survey. Constraints An Int. J., 17(1):51–85, 2012. URL: https://doi.org/10.1007/s10601-011-9115-6, doi:10.1007/S10601-011-9115-6.
- [246] Tony Minoru Tamura Lopes, André A. Ciré, Cid Carvalho de Souza, and Arnaldo Vieira Moura. A hybrid model for a multiproduct pipeline planning and scheduling problem. Constraints An Int. J., 15(2):151–189, 2010. URL: https://doi.org/10.1007/s10601-009-9086-z, doi:10.1007/S10601-009-9086-z.
- [247] Pierre Lopez, Hassane Alla, Ouajdi Korbaa, Pascal Yim, and Jean-Claude Gentina. Discussion on: 'solving transient scheduling problems with constraint programming' by o. korbaa, p. yim, and J.-C. gentina. Eur. J. Control, 6(6):521–524, 2000. doi:10.1016/S0947-3580(00)71114-9.
- [248] Thomas Lorigeon, Jean-Charles Billaut, and Jean-Louis Bouquard. A dynamic programming algorithm for scheduling jobs in a two-machine open shop with an availability constraint. J. Oper. Res. Soc., 53(11):1239–1246, 2002. URL: https://doi.org/10.1057/palgrave.jors.2601421, doi:10.1057/PALGRAVE.JORS. 2601421.
- [249] William T. Lunardi, Ernesto G. Birgin, Philippe Laborie, Débora P. Ronconi, and Holger Voos. Mixed integer linear programming and constraint programming models for the online printing shop scheduling problem. Comput. Oper. Res., 123:105020, 2020. URL: https://doi.org/10.1016/j.cor.2020.105020, doi: 10.1016/j.cor.2020.105020.
- [250] William Tessaro Lunardi. A Real-World Flexible Job Shop Scheduling Problem With Sequencing Flexibility: Mathematical Programming, Constraint Programming, and Metaheuristics. PhD thesis, University of Luxembourg, Luxembourg City, Luxembourg, 2020. URL: http://orbilu.uni.lu/handle/10993/43893.
- [251] Gilles Madi-Wamba and Nicolas Beldiceanu. The taskintersection constraint. In Claude-Guy Quimper, editor, Integration of AI and OR Techniques in Constraint Programming 13th International Conference, CPAIOR 2016, Banff, AB, Canada, May 29 June 1, 2016, Proceedings, volume 9676 of Lecture Notes in Computer Science, pages 246–261. Springer, 2016. doi:10.1007/978-3-319-33954-2_18.
- [252] Gilles Madi-Wamba, Yunbo Li, Anne-Cécile Orgerie, Nicolas Beldiceanu, and Jean-Marc Menaud. Green energy aware scheduling problem in virtualized datacenters. In 23rd IEEE International Conference on Parallel and Distributed Systems, ICPADS 2017, Shenzhen, China, December 15-17, 2017, pages 648–655. IEEE Computer Society, 2017. doi:10.1109/ICPADS.2017.00089.
- [253] Kai-Ling Mak, Jun Ma, and Wei Su. A constraint programming approach for production scheduling of multi-period virtual cellular manufacturing systems. In Sixth International Conference on Natural Computation, ICNC 2010, Yantai, Shandong, China, 10-12 August 2010, pages 4440–4444. IEEE, 2010. doi: 10.1109/ICNC.2010.5583494.
- [254] Arnaud Malapert and Margaux Nattaf. A new cp-approach for a parallel machine scheduling problem with time constraints on machine qualifications. In Louis-Martin Rousseau and Kostas Stergiou, editors, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 16th International Conference, CPAIOR 2019, Thessaloniki, Greece, June 4-7, 2019, Proceedings, volume 11494 of Lecture Notes in Computer Science, pages 426–442. Springer, 2019. doi:10.1007/978-3-030-19212-9_28.

- [255] Abid M. Malik. Constraint Programming Techniques for Optimal Instruction Scheduling. PhD thesis, University of Waterloo, Ontario, Canada, 2008. URL: https://hdl.handle.net/10012/3612.
- [256] Abid M. Malik, Jim McInnes, and Peter van Beek. Optimal basic block instruction scheduling for multiple-issue processors using constraint programming. Int. J. Artif. Intell. Tools, 17(1):37–54, 2008. doi:10.1142/S0218213008003765.
- [257] Christos T. Maravelias and Ignacio E. Grossmann. Using MILP and CP for the scheduling of batch chemical processes. In Jean-Charles Régin and Michel Rueher, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, First International Conference, CPAIOR 2004, Nice, France, April 20-22, 2004, Proceedings, volume 3011 of Lecture Notes in Computer Science, pages 1–20. Springer, 2004. doi:10.1007/978-3-540-24664-0_1.
- [258] Fae Martin, Arthur Pinkney, and Xinghuo Yu. Cane railway scheduling via constraint logic programming: Labelling order and constraints in a real-life application. *Ann. Oper. Res.*, 108(1-4):193–209, 2001. doi:10.1023/A:1016067230126.
- [259] Andrew J. Mason. Elastic constraint branching, the wedelin/carmen lagrangian heuristic and integer programming for personnel scheduling. Ann. Oper. Res., 108(1-4):239–276, 2001. doi:10.1023/A:1016023415105.
- [260] Zahra Mehdizadeh-Somarin, Reza Tavakkoli-Moghaddam, Mohammad Rohaninejad, Zdenek Hanzálek, and Behdin Vahedi Nouri. A constraint programming model for a reconfigurable job shop scheduling problem with machine availability. In Erlend Alfnes, Anita Romsdal, Jan Ola Strandhagen, Gregor von Cieminski, and David Romero, editors, Advances in Production Management Systems. Production Management Systems for Responsible Manufacturing, Service, and Logistics Futures IFIP WG 5.7 International Conference, APMS 2023, Trondheim, Norway, September 17-21, 2023, Proceedings, Part III, volume 691 of IFIP Advances in Information and Communication Technology, pages 477–490. Springer, 2023. doi:10.1007/978-3-031-43670-3_33.
- [261] Julien Menana. Automates et programmation par contraintes pour la planification de personnel. (Automata and Constraint Programming for Personnel Scheduling Problems). PhD thesis, University of Nantes, France, 2011. URL: https://tel.archives-ouvertes.fr/tel-00785838.
- [262] Leilei Meng, Chaoyong Zhang, Yaping Ren, Biao Zhang, and Chang Lv. Mixed-integer linear programming and constraint programming formulations for solving distributed flexible job shop scheduling problem. Comput. Ind. Eng., 142:106347, 2020. URL: https://doi.org/10.1016/j.cie.2020.106347, doi: 10.1016/j.CIE.2020.106347.
- [263] Alexandre Mercier-Aubin, Jonathan Gaudreault, and Claude-Guy Quimper. Leveraging constraint scheduling: A case study to the textile industry. In Emmanuel Hebrard and Nysret Musliu, editors, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 17th International Conference, CPAIOR 2020, Vienna, Austria, September 21-24, 2020, Proceedings, volume 12296 of Lecture Notes in Computer Science, pages 334-346. Springer, 2020. doi:10.1007/978-3-030-58942-4_22.
- [264] Mahdi Mokhtarzadeh, Reza Tavakkoli-Moghaddam, Behdin Vahedi Nouri, and Azadeh Farsi. Scheduling of human-robot collaboration in assembly of printed circuit boards: a constraint programming approach. Int. J. Comput. Integr. Manuf., 33(5):460–473, 2020. doi:10.1080/0951192X.2020.1736713.
- [265] Jean-Noël Monette, Yves Deville, and Pierre Dupont. A position-based propagator for the open-shop problem. In Pascal Van Hentenryck and Laurence A. Wolsey, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 4th International Conference, CPAIOR 2007, Brussels, Belgium, May 23-26, 2007, Proceedings, volume 4510 of Lecture Notes in Computer Science, pages 186–199. Springer, 2007. doi: 10.1007/978-3-540-72397-4_14.

- [266] Jean-Noël Monette, Yves Deville, and Pascal Van Hentenryck. Just-in-time scheduling with constraint programming. In Alfonso Gerevini, Adele E. Howe, Amedeo Cesta, and Ioannis Refanidis, editors, *Proceedings of the 19th International Conference on Automated Planning and Scheduling, ICAPS 2009, Thessaloniki, Greece, September 19-23, 2009.* AAAI, 2009. URL: http://aaai.org/ocs/index.php/ICAPS/ICAPS09/paper/view/712.
- [267] Roberto Montemanni and Mauro Dell'Amico. Constraint programming models for the parallel drone scheduling vehicle routing problem. EURO J. Comput. Optim., 11:100078, 2023. URL: https://doi.org/10.1016/j.ejco.2023.100078, doi:10.1016/J.EJCO.2023.100078.
- [268] Roberto Montemanni and Mauro Dell'Amico. Solving the parallel drone scheduling traveling salesman problem via constraint programming. Algorithms, 16(1):40, 2023. URL: https://doi.org/10.3390/a16010040, doi:10.3390/A16010040.
- [269] Morten Mossige, Arnaud Gotlieb, Helge Spieker, Hein Meling, and Mats Carlsson. Time-aware test case execution scheduling for cyber-physical systems. In J. Christopher Beck, editor, Principles and Practice of Constraint Programming 23rd International Conference, CP 2017, Melbourne, VIC, Australia, August 28 September 1, 2017, Proceedings, volume 10416 of Lecture Notes in Computer Science, pages 387–404. Springer, 2017. doi:10.1007/978-3-319-66158-2_25.
- [270] Arnaldo Vieira Moura, Cid C. de Souza, André A. Ciré, and Tony Minoru Tamura Lopes. Heuristics and constraint programming hybridizations for a real pipeline planning and scheduling problem. In *Proceedings of the 11th IEEE International Conference on Computational Science and Engineering, CSE 2008*, São Paulo, SP, Brazil, July 16-18, 2008, pages 455-462. IEEE Computer Society, 2008. doi:10.1109/CSE.2008.24.
- [271] Arnaldo Vieira Moura, Cid C. de Souza, André A. Ciré, and Tony Minoru Tamura Lopes. Planning and scheduling the operation of a very large oil pipeline network. In Peter J. Stuckey, editor, Principles and Practice of Constraint Programming, 14th International Conference, CP 2008, Sydney, Australia, September 14-18, 2008. Proceedings, volume 5202 of Lecture Notes in Computer Science, pages 36-51. Springer, 2008. doi:10.1007/978-3-540-85958-1_3.
- [272] David Müller, Marcus Gerhard Müller, Dominik Kress, and Erwin Pesch. An algorithm selection approach for the flexible job shop scheduling problem: Choosing constraint programming solvers through machine learning. Eur. J. Oper. Res., 302(3):874-891, 2022. URL: https://doi.org/10.1016/j.ejor.2022.01.034, doi:10.1016/J.EJOR.2022.01.034.
- [273] Stanislav Murín and Hana Rudová. Scheduling of mobile robots using constraint programming. In Thomas Schiex and Simon de Givry, editors, Principles and Practice of Constraint Programming 25th International Conference, CP 2019, Stamford, CT, USA, September 30 October 4, 2019, Proceedings, volume 11802 of Lecture Notes in Computer Science, pages 456-471. Springer, 2019. doi:10.1007/978-3-030-30048-7_27.
- [274] Seán Óg Murphy, Oscar Manzano, and Kenneth N. Brown. Design and evaluation of a constraint-based energy saving and scheduling recommender system. In Gilles Pesant, editor, Principles and Practice of Constraint Programming 21st International Conference, CP 2015, Cork, Ireland, August 31 September 4, 2015, Proceedings, volume 9255 of Lecture Notes in Computer Science, pages 687–703. Springer, 2015. doi:10.1007/978-3-319-23219-5_47.
- [275] Nicola Muscettola. Computing the envelope for stepwise-constant resource allocations. In Pascal Van Hentenryck, editor, Principles and Practice of Constraint Programming CP 2002, 8th International Conference, CP 2002, Ithaca, NY, USA, September 9-13, 2002, Proceedings, volume 2470 of Lecture Notes in Computer Science, pages 139–154. Springer, 2002. doi:10.1007/3-540-46135-3_10.
- [276] Margaux Nattaf, Christian Artigues, and Pierre Lopez. A hybrid exact method for a scheduling problem with a continuous resource and energy constraints. Constraints An Int. J., 20(3):304–324, 2015. URL: https://doi.org/10.1007/s10601-015-9192-z, doi:10.1007/S10601-015-9192-z.
- [277] Margaux Nattaf, Christian Artigues, and Pierre Lopez. Cumulative scheduling with variable task profiles and concave piecewise linear processing rate functions. Constraints An Int. J., 22(4):530–547, 2017. URL: https://doi.org/10.1007/s10601-017-9271-4, doi:10.1007/S10601-017-9271-4.

- [278] Margaux Nattaf and Arnaud Malapert. Filtering rules for flow time minimization in a parallel machine scheduling problem. In Helmut Simonis, editor, Principles and Practice of Constraint Programming 26th International Conference, CP 2020, Louvain-la-Neuve, Belgium, September 7-11, 2020, Proceedings, volume 12333 of Lecture Notes in Computer Science, pages 462-477. Springer, 2020. doi:10.1007/978-3-030-58475-7_27.
- [279] Su Nguyen, Dhananjay R. Thiruvady, Yuan Sun, and Mengjie Zhang. Genetic-based constraint programming for resource constrained job scheduling. CoRR, abs/2402.00459, 2024. URL: https://doi.org/10.48550/arXiv.2402.00459, arXiv:2402.00459, doi:10.48550/ARXIV.2402.00459.
- [280] Hiroki Nishikawa, Kana Shimada, Ittetsu Taniguchi, and Hiroyuki Tomiyama. Scheduling of malleable fork-join tasks with constraint programming. In Sixth International Symposium on Computing and Networking, CANDAR 2018, Takayama, Japan, November 23-27, 2018, pages 133–138. IEEE Computer Society, 2018. doi:10.1109/CANDAR.2018.00025.
- [281] Hiroki Nishikawa, Kana Shimada, Ittetsu Taniguchi, and Hiroyuki Tomiyama. Scheduling of malleable tasks based on constraint programming. In TENCON 2018 2018 IEEE Region 10 Conference, Jeju, South Korea, October 28-31, 2018, pages 1493–1498. IEEE, 2018. doi:10.1109/TENCON.2018.8650168.
- [282] Hiroki Nishikawa, Kana Shimada, Ittetsu Taniguchi, and Hiroyuki Tomiyama. A constraint programming approach to scheduling of malleable tasks. *Int. J. Netw. Comput.*, 9(2):131-146, 2019. URL: http://www.ijnc.org/index.php/ijnc/article/view/201.
- [283] Franco M. Novara, Juan M. Novas, and Gabriela P. Henning. A novel constraint programming model for large-scale scheduling problems in multiproduct multistage batch plants: Limited resources and campaign-based operation. Comput. Chem. Eng., 93:101–117, 2016. URL: https://doi.org/10.1016/j.compchemeng.2016.04.030, doi:10.1016/J.COMPCHEMENG.2016.04.030.
- [284] Juan M. Novas. Production scheduling and lot streaming at flexible job-shops environments using constraint programming. Comput. Ind. Eng., 136:252-264, 2019. URL: https://doi.org/10.1016/j.cie.2019.07.011, doi:10.1016/J.CIE.2019.07.011.
- [285] Juan M. Novas and Gabriela P. Henning. Reactive scheduling framework based on domain knowledge and constraint programming. Comput. Chem. Eng., 34(12):2129-2148, 2010. URL: https://doi.org/10.1016/j.compchemeng.2010.07.011, doi:10.1016/J.COMPCHEMENG.2010.07.011.
- [286] Juan M. Novas and Gabriela P. Henning. A comprehensive constraint programming approach for the rolling horizon-based scheduling of automated wet-etch stations. Comput. Chem. Eng., 42:189-205, 2012. URL: https://doi.org/10.1016/j.compchemeng.2012.01.005, doi:10.1016/J.COMPCHEMENG.2012.01.005.
- [287] Juan M. Novas and Gabriela P. Henning. Integrated scheduling of resource-constrained flexible manufacturing systems using constraint programming. Expert Syst. Appl., 41(5):2286-2299, 2014. URL: https://doi.org/10.1016/j.eswa.2013.09.026, doi:10.1016/J.ESWA.2013.09.026.
- [288] Angelo Oddi, Nicola Policella, Amedeo Cesta, and Gabriella Cortellessa. Generating high quality schedules for a spacecraft memory downlink problem. In Francesca Rossi, editor, Principles and Practice of Constraint Programming CP 2003, 9th International Conference, CP 2003, Kinsale, Ireland, September 29 October 3, 2003, Proceedings, volume 2833 of Lecture Notes in Computer Science, pages 570–584. Springer, 2003. doi:10.1007/978-3-540-45193-8_39.
- [289] Pierre Ouellet and Claude-Guy Quimper. Time-table extended-edge-finding for the cumulative constraint. In Christian Schulte, editor, Principles and Practice of Constraint Programming 19th International Conference, CP 2013, Uppsala, Sweden, September 16-20, 2013. Proceedings, volume 8124 of Lecture Notes in Computer Science, pages 562-577. Springer, 2013. doi:10.1007/978-3-642-40627-0_42.
- [290] Yanick Ouellet and Claude-Guy Quimper. A o(n \log ^2 n) checker and o(n^2 \log n) filtering algorithm for the energetic reasoning. In Willem Jan van Hoeve, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 15th International Conference, CPAIOR 2018, Delft, The Netherlands, June 26-29, 2018, Proceedings, volume 10848 of Lecture Notes in Computer Science, pages 477-494. Springer, 2018. doi:10.1007/978-3-319-93031-2_34.

- [291] Yanick Ouellet and Claude-Guy Quimper. A mincumulative resource constraint. In Pierre Schaus, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 19th International Conference, CPAIOR 2022, Los Angeles, CA, USA, June 20-23, 2022, Proceedings, volume 13292 of Lecture Notes in Computer Science, pages 318-334. Springer, 2022. doi:10.1007/978-3-031-08011-1_21.
- [292] Soukaina Oujana, Lionel Amodeo, Farouk Yalaoui, and D. Brodart. Solving a realistic hybrid and flexible flow shop scheduling problem through constraint programming: industrial case in a packaging company. In 8th International Conference on Control, Decision and Information Technologies, CoDIT 2022, Istanbul, Turkey, May 17-20, 2022, pages 106–111. IEEE, 2022. URL: https://doi.org/10.1109/CoDIT55151.2022.9803972, doi:10.1109/CoDIT55151.2022.9803972.
- [293] Cemalettin Öztürk, Semra Tunali, Brahim Hnich, and M. Arslan Ornek. Balancing and scheduling of flexible mixed model assembly lines. Constraints An Int. J., 18(3):434-469, 2013. URL: https://doi.org/10.1007/s10601-013-9142-6, doi:10.1007/s10601-013-9142-6.
- [294] Vaibhav Pandey and Poonam Saini. Constraint programming versus heuristic approach to mapreduce scheduling problem in hadoop YARN for energy minimization.

 J. Supercomput., 77(7):6788-6816, 2021. URL: https://doi.org/10.1007/s11227-020-03516-3, doi:10.1007/S11227-020-03516-3.
- [295] Claude Le Pape and Philippe Baptiste. A constraint programming library for preemptive and non-preemptive scheduling. In Mark Wallace, editor, *Proceedings* of the Third International Conference on the Practical Application of Constraint Technology, PACT 1997, Westminster Central Hall, London, UK, April 23-25, 1997, pages 237–256. Practical Application Company Ltd., 1997.
- [296] Claude Le Pape and Philippe Baptiste. Resource constraints for preemptive job-shop scheduling. Constraints An Int. J., 3(4):263–287, 1998. doi:10.1023/A: 1009723704757.
- [297] Hoonseok Park, Jumyung Um, Jae-Yoon Jung, and Martin Ruskowski. Developing a production scheduling system for modular factory using constraint programming. In Karsten Berns and Daniel Görges, editors, Advances in Service and Industrial Robotics Proceedings of the 28th International Conference on Robotics in Alpe-Adria-Danube Region, RAAD 2019, Kaiserslautern, Germany, June 19-21, 2019, volume 980 of Advances in Intelligent Systems and Computing, pages 126–133. Springer, 2019. doi:10.1007/978-3-030-19648-6_15.
- [298] Joseph C. Pemberton and Flavius Galiber III. A constraint-based approach to satellite scheduling. In Eugene C. Freuder and Richard J. Wallace, editors, Constraint Programming and Large Scale Discrete Optimization, Proceedings of a DIMACS Workshop, Princeton, New Jersey, USA, September 14-17, 1998, volume 57 of DIMACS Series in Discrete Mathematics and Theoretical Computer Science, pages 101–114. DIMACS/AMS, 1998. URL: https://doi.org/10.1090/dimacs/057/06, doi:10.1090/DIMACS/057/06.
- [299] Guillaume Perez, Gaël Glorian, Wijnand Suijlen, and Arnaud Lallouet. A constraint programming model for scheduling the unloading of trains in ports. In 35th IEEE International Conference on Tools with Artificial Intelligence, ICTAI 2023, Atlanta, GA, USA, November 6-8, 2023, pages 693–699. IEEE, 2023. doi:10.1109/ICTAI59109.2023.00108.
- [300] Guillaume Perez, Gael Glorian, Wijnand Suijlen, and Arnaud Lallouet. A constraint programming model for scheduling the unloading of trains in ports: Extended. CoRR, abs/2312.13682, 2023. URL: https://doi.org/10.48550/arXiv.2312.13682, arXiv:2312.13682, doi:10.48550/ARXIV.2312.13682.
- [301] Gilles Pesant, Gregory Rix, and Louis-Martin Rousseau. A comparative study of MIP and CP formulations for the B2B scheduling optimization problem. In Laurent Michel, editor, Integration of AI and OR Techniques in Constraint Programming 12th International Conference, CPAIOR 2015, Barcelona, Spain, May 18-22, 2015, Proceedings, volume 9075 of Lecture Notes in Computer Science, pages 306–321. Springer, 2015. doi:10.1007/978-3-319-18008-3_21.
- [302] Thierry Petit and Emmanuel Poder. The soft cumulative constraint. CoRR, abs/0907.0939, 2009. URL: http://arxiv.org/abs/0907.0939, arXiv:0907.0939.

- [303] Emmanuel Poder and Nicolas Beldiceanu. Filtering for a continuous multi-resources cumulative constraint with resource consumption and production. In Jussi Rintanen, Bernhard Nebel, J. Christopher Beck, and Eric A. Hansen, editors, *Proceedings of the Eighteenth International Conference on Automated Planning and Scheduling, ICAPS 2008, Sydney, Australia, September 14-18, 2008*, pages 264–271. AAAI, 2008. URL: http://www.aaai.org/Library/ICAPS/2008/icaps08-033.php.
- [304] Emmanuel Poder, Nicolas Beldiceanu, and Eric Sanlaville. Computing a lower approximation of the compulsory part of a task with varying duration and varying resource consumption. Eur. J. Oper. Res., 153(1):239–254, 2004. doi:10.1016/S0377-2217(02)00756-7.
- [305] Maximilian Pohl, Christian Artigues, and Rainer Kolisch. Solving the time-discrete winter runway scheduling problem: A column generation and constraint programming approach. Eur. J. Oper. Res., 299(2):674-689, 2022. URL: https://doi.org/10.1016/j.ejor.2021.08.028, doi:10.1016/J.EJOR.2021.08.028.
- [306] Oliver Polo-Mejía, Christian Artigues, Pierre Lopez, and Virginie Basini. Mixed-integer/linear and constraint programming approaches for activity scheduling in a nuclear research facility. *Int. J. Prod. Res.*, 58(23):7149–7166, 2020. doi:10.1080/00207543.2019.1693654.
- [307] Louis Popovic, Alain Côté, Mohamed Gaha, Franklin Nguewouo, and Quentin Cappart. Scheduling the equipment maintenance of an electric power transmission network using constraint programming. In Christine Solnon, editor, 28th International Conference on Principles and Practice of Constraint Programming, CP 2022, July 31 to August 8, 2022, Haifa, Israel, volume 235 of LIPIcs, pages 34:1–34:15. Schloss Dagstuhl Leibniz-Zentrum für Informatik, 2022. URL: https://doi.org/10.4230/LIPIcs.CP.2022.34, doi:10.4230/LIPICS.CP.2022.34.
- [308] Shahrzad M. Pour, John H. Drake, Lena Secher Ejlertsen, Kourosh Marjani Rasmussen, and Edmund K. Burke. A hybrid constraint programming/mixed integer programming framework for the preventive signaling maintenance crew scheduling problem. Eur. J. Oper. Res., 269(1):341–352, 2018. URL: https://doi.org/10.1016/j.ejor.2017.08.033, doi:10.1016/J.EJOR.2017.08.033.
- [309] Guillaume Povéda, Nahum Álvarez, and Christian Artigues. Partially preemptive multi skill/mode resource-constrained project scheduling with generalized precedence relations and calendars. In Roland H. C. Yap, editor, 29th International Conference on Principles and Practice of Constraint Programming, CP 2023, August 27-31, 2023, Toronto, Canada, volume 280 of LIPIcs, pages 31:1–31:21. Schloss Dagstuhl Leibniz-Zentrum für Informatik, 2023. URL: https://doi.org/10.4230/LIPIcs.CP.2023.31, doi:10.4230/LIPICS.CP.2023.31.
- [310] Cédric Pralet. An incomplete constraint-based system for scheduling with renewable resources. In J. Christopher Beck, editor, *Principles and Practice of Constraint Programming 23rd International Conference, CP 2017, Melbourne, VIC, Australia, August 28 September 1, 2017, Proceedings, volume 10416 of Lecture Notes in Computer Science*, pages 243–261. Springer, 2017. doi:10.1007/978-3-319-66158-2_16.
- [311] Cédric Pralet, Solange Lemai-Chenevier, and Jean Jaubert. Scheduling running modes of satellite instruments using constraint-based local search. In Gilles Pesant, editor, Principles and Practice of Constraint Programming 21st International Conference, CP 2015, Cork, Ireland, August 31 September 4, 2015, Proceedings, volume 9255 of Lecture Notes in Computer Science, pages 704–719. Springer, 2015. doi:10.1007/978-3-319-23219-5_48.
- [312] Bruno A. Prata, Levi R. Abreu, and Marcelo S. Nagano. Applications of constraint programming in production scheduling problems: A descriptive bibliometric analysis. Results in Control and Optimization, 14:100350, 2024. URL: https://www.sciencedirect.com/science/article/pii/S2666720723001522, doi: https://doi.org/10.1016/j.rico.2023.100350.
- [313] Jean-Francois Puget. Applications of constraint programming. In Ugo Montanari and Francesca Rossi, editors, Principles and Practice of Constraint Programming CP'95, First International Conference, CP'95, Cassis, France, September 19-22, 1995, Proceedings, volume 976 of Lecture Notes in Computer Science, pages 647-650. Springer, 1995. doi:10.1007/3-540-60299-2_43.

- [314] Ming Qin, Runsen Wang, Zhongshun Shi, Lingxuan Liu, and Leyuan Shi. A genetic programming-based scheduling approach for hybrid flow shop with a batch processor and waiting time constraint. *IEEE Trans Autom. Sci. Eng.*, 18(1):94–105, 2021. doi:10.1109/TASE.2019.2947398.
- [315] Tianbao Qin, Yuquan Du, Jiang Hang Chen, and Mei Sha. Combining mixed integer programming and constraint programming to solve the integrated scheduling problem of container handling operations of a single vessel. Eur. J. Oper. Res., 285(3):884-901, 2020. URL: https://doi.org/10.1016/j.ejor.2020.02.021, doi:10.1016/J.EJOR.2020.02.021.
- [316] Yang Qu, Juha-Pekka Soininen, and Jari Nurmi. Using constraint programming to achieve optimal prefetch scheduling for dependent tasks on run-time reconfigurable devices. In *International Symposium on System-on-Chip, SoC 2006, Tampere, Finland, November 13-16, 2006*, pages 1–4. IEEE, 2006. doi:10.1109/ISSOC.2006.321973.
- [317] Oscar Quiroga, Luis Zeballos, and Gabriela P. Henning. A constraint programming approach to tool allocation and resource scheduling in FMS. In *Proceedings* of the 2005 IEEE International Conference on Robotics and Automation, ICRA 2005, April 18-22, 2005, Barcelona, Spain, pages 3715–3720. IEEE, 2005. doi:10.1109/ROBOT.2005.1570686.
- [318] Andrea Rendl, Matthias Prandtstetter, Gerhard Hiermann, Jakob Puchinger, and Günther R. Raidl. Hybrid heuristics for multimodal homecare scheduling. In Nicolas Beldiceanu, Narendra Jussien, and Eric Pinson, editors, Integration of AI and OR Techniques in Contraint Programming for Combinatorial Optimization Problems 9th International Conference, CPAIOR 2012, Nantes, France, May 28 June 1, 2012. Proceedings, volume 7298 of Lecture Notes in Computer Science, pages 339–355. Springer, 2012. doi:10.1007/978-3-642-29828-8_22.
- [319] Vahid Riahi, M. A. Hakim Newton, Kaile Su, and Abdul Sattar. Local search for flowshops with setup times and blocking constraints. In Mathijs de Weerdt, Sven Koenig, Gabriele Röger, and Matthijs T. J. Spaan, editors, *Proceedings of the Twenty-Eighth International Conference on Automated Planning and Scheduling, ICAPS 2018, Delft, The Netherlands, June 24-29, 2018*, pages 199–207. AAAI Press, 2018. URL: https://aaai.org/ocs/index.php/ICAPS/ICAPS18/paper/view/17755.
- [320] Robert Rodosek and Mark Wallace. A generic model and hybrid algorithm for hoist scheduling problems. In Michael J. Maher and Jean-Francois Puget, editors, Principles and Practice of Constraint Programming CP98, 4th International Conference, Pisa, Italy, October 26-30, 1998, Proceedings, volume 1520 of Lecture Notes in Computer Science, pages 385–399. Springer, 1998. doi:10.1007/3-540-49481-2_28.
- [321] Roberto Rossi, Armagan Tarim, Brahim Hnich, and Steven D. Prestwich. Replenishment planning for stochastic inventory systems with shortage cost. In Pascal Van Hentenryck and Laurence A. Wolsey, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 4th International Conference, CPAIOR 2007, Brussels, Belgium, May 23-26, 2007, Proceedings, volume 4510 of Lecture Notes in Computer Science, pages 229-243. Springer, 2007. doi:10.1007/978-3-540-72397-4_17.
- [322] David Sacramento, Christine Solnon, and David Pisinger. Constraint programming and local search heuristic: a matheuristic approach for routing and scheduling feeder vessels in multi-terminal ports. Oper. Res. Forum, 1(4), 2020. URL: https://doi.org/10.1007/s43069-020-00036-x, doi:10.1007/S43069-020-00036-X.
- [323] Ruslan Sadykov. A hybrid branch-and-cut algorithm for the one-machine scheduling problem. In Jean-Charles Régin and Michel Rueher, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, First International Conference, CPAIOR 2004, Nice, France, April 20-22, 2004, Proceedings, volume 3011 of Lecture Notes in Computer Science, pages 409-415. Springer, 2004. doi:10.1007/978-3-540-24664-0_31.
- [324] Ruslan Sadykov and Laurence A. Wolsey. Integer programming and constraint programming in solving a multimachine assignment scheduling problem with deadlines and release dates. INFORMS J. Comput., 18(2):209–217, 2006. URL: https://doi.org/10.1287/ijoc.1040.0110, doi:10.1287/IJOC.1040.0110.

- [325] Hani El Sakkout and Mark Wallace. Probe backtrack search for minimal perturbation in dynamic scheduling. Constraints An Int. J., 5(4):359–388, 2000. doi:10.1023/A:1009856210543.
- [326] Pierre Schaus, Pascal Van Hentenryck, Jean-Noël Monette, Carleton Coffrin, Laurent Michel, and Yves Deville. Solving steel mill slab problems with constraint-based techniques: Cp, lns, and CBLS. Constraints An Int. J., 16(2):125–147, 2011. URL: https://doi.org/10.1007/s10601-010-9100-5, doi:10.1007/S10601-010-9100-5.
- [327] Klaus Schild and Jörg Würtz. Scheduling of time-triggered real-time systems. Constraints An Int. J., 5(4):335–357, 2000. doi:10.1023/A:1009804226473.
- [328] Andreas Schutt, Geoffrey Chu, Peter J. Stuckey, and Mark G. Wallace. Maximising the net present value for resource-constrained project scheduling. In Nicolas Beldiceanu, Narendra Jussien, and Eric Pinson, editors, Integration of AI and OR Techniques in Contraint Programming for Combinatorial Optimization Problems 9th International Conference, CPAIOR 2012, Nantes, France, May 28 June1, 2012. Proceedings, volume 7298 of Lecture Notes in Computer Science, pages 362–378. Springer, 2012. doi:10.1007/978-3-642-29828-8_24.
- [329] Andreas Schutt, Thibaut Feydy, and Peter J. Stuckey. Explaining time-table-edge-finding propagation for the cumulative resource constraint. In Carla P. Gomes and Meinolf Sellmann, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 10th International Conference, CPAIOR 2013, Yorktown Heights, NY, USA, May 18-22, 2013. Proceedings, volume 7874 of Lecture Notes in Computer Science, pages 234–250. Springer, 2013. doi:10.1007/978-3-642-38171-3_16.
- [330] Andreas Schutt, Thibaut Feydy, and Peter J. Stuckey. Scheduling optional tasks with explanation. In Christian Schulte, editor, Principles and Practice of Constraint Programming 19th International Conference, CP 2013, Uppsala, Sweden, September 16-20, 2013. Proceedings, volume 8124 of Lecture Notes in Computer Science, pages 628-644. Springer, 2013. doi:10.1007/978-3-642-40627-0_47.
- [331] Andreas Schutt, Thibaut Feydy, Peter J. Stuckey, and Mark Wallace. Why cumulative decomposition is not as bad as it sounds. In Ian P. Gent, editor, Principles and Practice of Constraint Programming CP 2009, 15th International Conference, CP 2009, Lisbon, Portugal, September 20-24, 2009, Proceedings, volume 5732 of Lecture Notes in Computer Science, pages 746–761. Springer, 2009. doi:10.1007/978-3-642-04244-7_58.
- [332] Andreas Schutt, Thibaut Feydy, Peter J. Stuckey, and Mark G. Wallace. Explaining the cumulative propagator. Constraints An Int. J., 16(3):250–282, 2011. URL: https://doi.org/10.1007/s10601-010-9103-2, doi:10.1007/S10601-010-9103-2.
- [333] Andreas Schutt and Peter J. Stuckey. Explaining producer/consumer constraints. In Michel Rueher, editor, Principles and Practice of Constraint Programming 22nd International Conference, CP 2016, Toulouse, France, September 5-9, 2016, Proceedings, volume 9892 of Lecture Notes in Computer Science, pages 438–454. Springer, 2016. doi:10.1007/978-3-319-44953-1_28.
- [334] Andreas Schutt and Armin Wolf. A new $O(n^2 \log n)$ not-first/not-last pruning algorithm for cumulative resource constraints. In David Cohen, editor, Principles and Practice of Constraint Programming CP 2010 16th International Conference, CP 2010, St. Andrews, Scotland, UK, September 6-10, 2010. Proceedings, volume 6308 of Lecture Notes in Computer Science, pages 445–459. Springer, 2010. doi:10.1007/978-3-642-15396-9_36.
- [335] Thiago Serra, Gilberto Nishioka, and Fernando J. M. Marcellino. The offshore resources scheduling problem: Detailing a constraint programming approach. In Michela Milano, editor, Principles and Practice of Constraint Programming 18th International Conference, CP 2012, Québec City, QC, Canada, October 8-12, 2012. Proceedings, volume 7514 of Lecture Notes in Computer Science, pages 823-839. Springer, 2012. doi:10.1007/978-3-642-33558-7_59.
- [336] Aftab Ahmed Shaikh and Abdullah Ayub Khan. Management of electronic ledger: a constraint programming approach for solving curricula scheduling problems. Int. J. Electron. Secur. Digit. Forensics, 15(1):88–99, 2023. doi:10.1504/IJESDF.2023.10045616.

- [337] Ganquan Shi, Zhouwang Yang, Yang Xu, and Yuchen Quan. Solving the integrated process planning and scheduling problem using an enhanced constraint programming-based approach. *Int. J. Prod. Res.*, 60(18):5505–5522, 2022. doi:10.1080/00207543.2021.1963496.
- [338] Seung Yeob Shin, Yuriy Brun, Hari Balasubramanian, Philip L. Henneman, and Leon J. Osterweil. Discrete-event simulation and integer linear programming for constraint-aware resource scheduling. *IEEE Trans. Syst. Man Cybern. Syst.*, 48(9):1578–1593, 2018. doi:10.1109/TSMC.2017.2681623.
- [339] Mohamed Siala. Search, propagation, and learning in sequencing and scheduling problems. Constraints An Int. J., 20(4):479-480, 2015. URL: https://doi.org/10.1007/s10601-015-9213-y, doi:10.1007/s10601-015-9213-y.
- [340] Mohamed Siala, Christian Artigues, and Emmanuel Hebrard. Two clause learning approaches for disjunctive scheduling. In Gilles Pesant, editor, Principles and Practice of Constraint Programming 21st International Conference, CP 2015, Cork, Ireland, August 31 September 4, 2015, Proceedings, volume 9255 of Lecture Notes in Computer Science, pages 393–402. Springer, 2015. doi:10.1007/978-3-319-23219-5_28.
- [341] Gilles Simonin, Christian Artigues, Emmanuel Hebrard, and Pierre Lopez. Scheduling scientific experiments on the rosetta/philae mission. In Michela Milano, editor, Principles and Practice of Constraint Programming 18th International Conference, CP 2012, Québec City, QC, Canada, October 8-12, 2012. Proceedings, volume 7514 of Lecture Notes in Computer Science, pages 23–37. Springer, 2012. doi:10.1007/978-3-642-33558-7_5.
- [342] Gilles Simonin, Christian Artigues, Emmanuel Hebrard, and Pierre Lopez. Scheduling scientific experiments for comet exploration. Constraints An Int. J., 20(1):77-99, 2015. URL: https://doi.org/10.1007/s10601-014-9169-3, doi:10.1007/S10601-014-9169-3.
- [343] Helmut Simonis. The CHIP system and its applications. In Ugo Montanari and Francesca Rossi, editors, Principles and Practice of Constraint Programming CP'95, First International Conference, CP'95, Cassis, France, September 19-22, 1995, Proceedings, volume 976 of Lecture Notes in Computer Science, pages 643-646. Springer, 1995. doi:10.1007/3-540-60299-2_42.
- [344] Helmut Simonis. Models for global constraint applications. Constraints An Int. J., 12(1):63-92, 2007. URL: https://doi.org/10.1007/s10601-006-9011-7, doi:10.1007/S10601-006-9011-7.
- [345] Helmut Simonis and Trijntje Cornelissens. Modelling producer/consumer constraints. In Ugo Montanari and Francesca Rossi, editors, Principles and Practice of Constraint Programming CP'95, First International Conference, CP'95, Cassis, France, September 19-22, 1995, Proceedings, volume 976 of Lecture Notes in Computer Science, pages 449-462. Springer, 1995. doi:10.1007/3-540-60299-2_27.
- [346] Samuel Squillaci, Cédric Pralet, and Stéphanie Roussel. Scheduling complex observation requests for a constellation of satellites: Large neighborhood search approaches. In André A. Ciré, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 20th International Conference, CPAIOR 2023, Nice, France, May 29 June 1, 2023, Proceedings, volume 13884 of Lecture Notes in Computer Science, pages 443–459. Springer, 2023. doi: 10.1007/978-3-031-33271-5_29.
- [347] Kemal Subulan and Gizem Çakir. Constraint programming-based transformation approach for a mixed fuzzy-stochastic resource investment project scheduling problem. Soft Comput., 26(5):2523-2560, 2022. URL: https://doi.org/10.1007/s00500-021-06399-5, doi:10.1007/S00500-021-06399-5.
- [348] Yuan Sun, Su Nguyen, Dhananjay R. Thiruvady, Xiaodong Li, Andreas T. Ernst, and Uwe Aickelin. Enhancing constraint programming via supervised learning for job shop scheduling. CoRR, abs/2211.14492, 2022. URL: https://doi.org/10.48550/arXiv.2211.14492, arXiv:2211.14492, doi:10.48550/ARXIV.2211.14492.

- [349] Zheng Sun, Hong Li, Min Yao, and Nan Li. Scheduling optimization techniques for flexray using constraint-programming. In Peidong Zhu, Lizhe Wang, Feng Xia, Huajun Chen, Ian McLoughlin, Shiao-Li Tsao, Mitsuhisa Sato, Sun-Ki Chai, and Irwin King, editors, 2010 IEEE/ACM Int'l Conference on Green Computing and Communications, GreenCom 2010, & Int'l Conference on Cyber, Physical and Social Computing, CPSCom 2010, Hangzhou, China, December 18-20, 2010, pages 931-936. IEEE Computer Society, 2010. URL: https://doi.org/10.1109/GreenCom-CPSCom.2010.111, doi:10.1109/GREENCOM-CPSCOM.2010.111.
- [350] Suresh Sundaram, V. Mani, S. N. Omkar, and H. J. Kim. Divisible load scheduling in distributed system with buffer constraints: genetic algorithm and linear programming approach. *Int. J. Parallel Emergent Distributed Syst.*, 21(5):303–321, 2006. doi:10.1080/17445760600567842.
- [351] Ria Szeredi and Andreas Schutt. Modelling and solving multi-mode resource-constrained project scheduling. In Michel Rueher, editor, Principles and Practice of Constraint Programming 22nd International Conference, CP 2016, Toulouse, France, September 5-9, 2016, Proceedings, volume 9892 of Lecture Notes in Computer Science, pages 483-492. Springer, 2016. doi:10.1007/978-3-319-44953-1_31.
- [352] Tanya Y. Tang and J. Christopher Beck. CP and hybrid models for two-stage batching and scheduling. In Emmanuel Hebrard and Nysret Musliu, editors, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 17th International Conference, CPAIOR 2020, Vienna, Austria, September 21-24, 2020, Proceedings, volume 12296 of Lecture Notes in Computer Science, pages 431-446. Springer, 2020. doi:10.1007/978-3-030-58942-4_28.
- [353] Yuanjie Tang, Rengkui Liu, Futian Wang, Quanxin Sun, and Amr A. Kandil. Scheduling optimization of linear schedule with constraint programming. Comput. Aided Civ. Infrastructure Eng., 33(2):124-151, 2018. URL: https://doi.org/10.1111/mice.12277, doi:10.1111/MICE.12277.
- [354] Fabio Tardivo, Agostino Dovier, Andrea Formisano, Laurent Michel, and Enrico Pontelli. Constraint propagation on GPU: A case study for the cumulative constraint. In André A. Ciré, editor, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 20th International Conference, CPAIOR 2023, Nice, France, May 29 June 1, 2023, Proceedings, volume 13884 of Lecture Notes in Computer Science, pages 336–353. Springer, 2023. doi: 10.1007/978-3-031-33271-5_22.
- [355] Pierre Tassel, Martin Gebser, and Konstantin Schekotihin. An end-to-end reinforcement learning approach for job-shop scheduling problems based on constraint programming. In Sven Koenig, Roni Stern, and Mauro Vallati, editors, *Proceedings of the Thirty-Third International Conference on Automated Planning and Scheduling, July 8-13, 2023, Prague, Czech Republic*, pages 614–622. AAAI Press, 2023. URL: https://doi.org/10.1609/icaps.v33i1.27243, doi:10.1609/ICAPS.V33I1.27243.
- [356] Pierre Tassel, Martin Gebser, and Konstantin Schekotihin. An end-to-end reinforcement learning approach for job-shop scheduling problems based on constraint programming. CoRR, abs/2306.05747, 2023. URL: https://doi.org/10.48550/arXiv.2306.05747, arXiv:2306.05747, doi:10.48550/ARXIV.2306.05747.
- [357] David B. H. Tay. COPS: A constraint programming approach to resource-limited project scheduling. Comput. J., 35(Additional-Papers):A237–A249, 1992.
- [358] Erich Christian Teppan. Types of flexible job shop scheduling: A constraint programming experiment. In Ana Paula Rocha, Luc Steels, and H. Jaap van den Herik, editors, Proceedings of the 14th International Conference on Agents and Artificial Intelligence, ICAART 2022, Volume 3, Online Streaming, February 3-5, 2022, pages 516–523. SCITEPRESS, 2022. doi:10.5220/0010849900003116.
- [359] Alexander Tesch. A nearly exact propagation algorithm for energetic reasoning in \mathcal o(n^2 \log n). In Michel Rueher, editor, Principles and Practice of Constraint Programming 22nd International Conference, CP 2016, Toulouse, France, September 5-9, 2016, Proceedings, volume 9892 of Lecture Notes in Computer Science, pages 493–519. Springer, 2016. doi:10.1007/978-3-319-44953-1_32.
- [360] Alexander Tesch. Improving energetic propagations for cumulative scheduling. In John N. Hooker, editor, Principles and Practice of Constraint Programming 24th International Conference, CP 2018, Lille, France, August 27-31, 2018, Proceedings, volume 11008 of Lecture Notes in Computer Science, pages 629-645. Springer, 2018. doi:10.1007/978-3-319-98334-9_41.

- [361] Dhananjay R. Thiruvady, Christian Blum, Bernd Meyer, and Andreas T. Ernst. Hybridizing beam-aco with constraint programming for single machine job scheduling. In Maria J. Blesa, Christian Blum, Luca Di Gaspero, Andrea Roli, Michael Sampels, and Andrea Schaerf, editors, Hybrid Metaheuristics, 6th International Workshop, HM 2009, Udine, Italy, October 16-17, 2009. Proceedings, volume 5818 of Lecture Notes in Computer Science, pages 30-44. Springer, 2009. doi:10.1007/978-3-642-04918-7_3.
- [362] Christian Timpe. Solving planning and scheduling problems with combined integer and constraint programming. OR Spectr., 24(4):431-448, 2002. URL: https://doi.org/10.1007/s00291-002-0107-1, doi:10.1007/s00291-002-0107-1.
- [363] Mary Tom. Fuzzy multi-constraint programming model for weekly meals scheduling. In 2019 IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2019, New Orleans, LA, USA, June 23-26, 2019, pages 1-6. IEEE, 2019. doi:10.1109/FUZZ-IEEE.2019.8859029.
- [364] Seyda Topaloglu and Irem Ozkarahan. A constraint programming-based solution approach for medical resident scheduling problems. Comput. Oper. Res., 38(1):246-255, 2011. URL: https://doi.org/10.1016/j.cor.2010.04.018, doi:10.1016/J.COR.2010.04.018.
- [365] Meriem Touat, Belaid Benhamou, and Fatima Benbouzid-Si Tayeb. A constraint programming model for the scheduling problem with flexible maintenance under human resource constraints. In Ana Paula Rocha, Luc Steels, and H. Jaap van den Herik, editors, *Proceedings of the 14th International Conference on Agents and Artificial Intelligence, ICAART 2022, Volume 3, Online Streaming, February 3-5, 2022*, pages 195–202. SCITEPRESS, 2022.
- [366] Touraïvane. Constraint programming and industrial applications. In Ugo Montanari and Francesca Rossi, editors, Principles and Practice of Constraint Programming CP'95, First International Conference, CP'95, Cassis, France, September 19-22, 1995, Proceedings, volume 976 of Lecture Notes in Computer Science, pages 640-642. Springer, 1995. doi:10.1007/3-540-60299-2_41.
- [367] Mariem Trojet, Fehmi H'Mida, and Pierre Lopez. Project scheduling under resource constraints: Application of the cumulative global constraint in a decision support framework. Comput. Ind. Eng., 61(2):357–363, 2011. URL: https://doi.org/10.1016/j.cie.2010.08.014, doi:10.1016/J.CIE.2010.08.014.
- [368] Edward P. K. Tsang. Constraint based scheduling: Applying constraint programming to scheduling problems. J. Sched., 6(4):413-414, 2003. doi:10.1023/A: 1024016929283.
- [369] Carmelo Del Valle, Antonio A. Márquez, Rafael M. Gasca, and Miguel Toro. On selecting and scheduling assembly plans using constraint programming. In Vasile Palade, Robert J. Howlett, and Lakhmi C. Jain, editors, Knowledge-Based Intelligent Information and Engineering Systems, 7th International Conference, KES 2003, Oxford, UK, September 3-5, 2003, Proceedings, Part II, volume 2774 of Lecture Notes in Computer Science, pages 1329–1336. Springer, 2003. doi:10.1007/978-3-540-45226-3_180.
- [370] J. M. van den Akker, Guido Diepen, and J. A. Hoogeveen. A column generation based destructive lower bound for resource constrained project scheduling problems. In Pascal Van Hentenryck and Laurence A. Wolsey, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 4th International Conference, CPAIOR 2007, Brussels, Belgium, May 23-26, 2007, Proceedings, volume 4510 of Lecture Notes in Computer Science, pages 376–390. Springer, 2007. doi:10.1007/978-3-540-72397-4_27.
- [371] Pim van den Bogaerdt and Mathijs de Weerdt. Lower bounds for uniform machine scheduling using decision diagrams. In Louis-Martin Rousseau and Kostas Stergiou, editors, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 16th International Conference, CPAIOR 2019, Thessaloniki, Greece, June 4-7, 2019, Proceedings, volume 11494 of Lecture Notes in Computer Science, pages 565–580. Springer, 2019. doi:10.1007/978-3-030-19212-9_38.
- [372] Roman van der Krogt, James Little, Kenneth Pulliam, Sue Hanhilammi, and Yue Jin. Scheduling for cellular manufacturing. In Christian Bessiere, editor, Principles and Practice of Constraint Programming CP 2007, 13th International Conference, CP 2007, Providence, RI, USA, September 23-27, 2007, Proceedings, volume 4741 of Lecture Notes in Computer Science, pages 105–117. Springer, 2007. doi:10.1007/978-3-540-74970-7_10.

- [373] Willem Jan van Hoeve, Carla P. Gomes, Bart Selman, and Michele Lombardi. Optimal multi-agent scheduling with constraint programming. In *Proceedings of the Twenty-Second AAAI Conference on Artificial Intelligence*, July 22-26, 2007, Vancouver, British Columbia, Canada, pages 1813–1818. AAAI Press, 2007. URL: http://www.aaai.org/Library/AAAI/2007/aaai07-291.php.
- [374] József Váncza and András Márkus. A constraint engine for manufacturing process planning. In Toby Walsh, editor, Principles and Practice of Constraint Programming CP 2001, 7th International Conference, CP 2001, Paphos, Cyprus, November 26 December 1, 2001, Proceedings, volume 2239 of Lecture Notes in Computer Science, pages 745–759. Springer, 2001. doi:10.1007/3-540-45578-7_60.
- [375] Gérard Verfaillie and Michel Lemaître. Selecting and scheduling observations for agile satellites: Some lessons from the constraint reasoning community point of view. In Toby Walsh, editor, Principles and Practice of Constraint Programming CP 2001, 7th International Conference, CP 2001, Paphos, Cyprus, November 26 December 1, 2001, Proceedings, volume 2239 of Lecture Notes in Computer Science, pages 670–684. Springer, 2001. doi:10.1007/3-540-45578-7_55.
- [376] Petr Vilím. Batch processing with sequence dependent setup times. In Pascal Van Hentenryck, editor, Principles and Practice of Constraint Programming CP 2002, 8th International Conference, CP 2002, Ithaca, NY, USA, September 9-13, 2002, Proceedings, volume 2470 of Lecture Notes in Computer Science, page 764. Springer, 2002. doi:10.1007/3-540-46135-3_62.
- [377] Petr Vilím. Computing explanations for global scheduling constraints. In Francesca Rossi, editor, Principles and Practice of Constraint Programming CP 2003, 9th International Conference, CP 2003, Kinsale, Ireland, September 29 October 3, 2003, Proceedings, volume 2833 of Lecture Notes in Computer Science, page 1000. Springer, 2003. doi:10.1007/978-3-540-45193-8_124.
- [378] Petr Vilím. O(n log n) filtering algorithms for unary resource constraint. In Jean-Charles Régin and Michel Rueher, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, First International Conference, CPAIOR 2004, Nice, France, April 20-22, 2004, Proceedings, volume 3011 of Lecture Notes in Computer Science, pages 335–347. Springer, 2004. doi:10.1007/978-3-540-24664-0_23.
- [379] Petr Vilím. Computing explanations for the unary resource constraint. In Roman Barták and Michela Milano, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, Second International Conference, CPAIOR 2005, Prague, Czech Republic, May 30 June 1, 2005, Proceedings, volume 3524 of Lecture Notes in Computer Science, pages 396–409. Springer, 2005. doi:10.1007/11493853_29.
- [380] Petr Vilím. Edge finding filtering algorithm for discrete cumulative resources in $O(kn \log n)$ {\mathcal O}(kn {\rm log} n). In Ian P. Gent, editor, Principles and Practice of Constraint Programming CP 2009, 15th International Conference, CP 2009, Lisbon, Portugal, September 20-24, 2009, Proceedings, volume 5732 of Lecture Notes in Computer Science, pages 802-816. Springer, 2009. doi:10.1007/978-3-642-04244-7_62.
- [381] Petr Vilím. Max energy filtering algorithm for discrete cumulative resources. In Willem Jan van Hoeve and John N. Hooker, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 6th International Conference, CPAIOR 2009, Pittsburgh, PA, USA, May 27-31, 2009, Proceedings, volume 5547 of Lecture Notes in Computer Science, pages 294–308. Springer, 2009. doi:10.1007/978-3-642-01929-6_22.
- [382] Petr Vilím. Timetable edge finding filtering algorithm for discrete cumulative resources. In Tobias Achterberg and J. Christopher Beck, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems 8th International Conference, CPAIOR 2011, Berlin, Germany, May 23-27, 2011. Proceedings, volume 6697 of Lecture Notes in Computer Science, pages 230-245. Springer, 2011. doi:10.1007/978-3-642-21311-3_22.
- [383] Petr Vilím, Roman Barták, and Ondrej Cepek. Unary resource constraint with optional activities. In Mark Wallace, editor, *Principles and Practice of Constraint Programming CP 2004, 10th International Conference, CP 2004, Toronto, Canada, September 27 October 1, 2004, Proceedings*, volume 3258 of Lecture Notes in Computer Science, pages 62–76. Springer, 2004. doi:10.1007/978-3-540-30201-8_8.

- [384] Petr Vilím, Roman Barták, and Ondrej Cepek. Extension of $O(n \log n)$ filtering algorithms for the unary resource constraint to optional activities. Constraints An Int. J., 10(4):403-425, 2005. URL: https://doi.org/10.1007/s10601-005-2814-0, doi:10.1007/S10601-005-2814-0.
- [385] Petr Vilím, Philippe Laborie, and Paul Shaw. Failure-directed search for constraint-based scheduling. In Laurent Michel, editor, Integration of AI and OR Techniques in Constraint Programming 12th International Conference, CPAIOR 2015, Barcelona, Spain, May 18-22, 2015, Proceedings, volume 9075 of Lecture Notes in Computer Science, pages 437–453. Springer, 2015. doi:10.1007/978-3-319-18008-3_30.
- [386] Karen Villaverde and Enrico Pontelli. An investigation of scheduling in distributed constraint logic programming. In David A. Bader and Ashfaq A. Khokhar, editors, Proceedings of the ISCA 17th International Conference on Parallel and Distributed Computing Systems, September 15-17, 2004, The Canterbury Hotel, San Francisco, California, USA, pages 98–103. ISCA, 2004.
- [387] Marek Vlk, Zdenek Hanzálek, and Siyu Tang. Constraint programming approaches to joint routing and scheduling in time-sensitive networks. Comput. Ind. Eng., 157:107317, 2021. URL: https://doi.org/10.1016/j.cie.2021.107317, doi:10.1016/J.CIE.2021.107317.
- [388] Mark Wallace. Practical applications of constraint programming. Constraints An Int. J., 1(1/2):139–168, 1996. doi:10.1007/BF00143881.
- [389] Mark Wallace and Neil Yorke-Smith. A new constraint programming model and solving for the cyclic hoist scheduling problem. Constraints An Int. J., 25(3-4):319-337, 2020. URL: https://doi.org/10.1007/s10601-020-09316-z, doi:10.1007/s10601-020-09316-z.
- [390] Ruixin Wang and Nicolas Barnier. Global propagation of transition cost for fixed job scheduling. In Giuseppe De Giacomo, Alejandro Catalá, Bistra Dilkina, Michela Milano, Senén Barro, Alberto Bugarín, and Jérôme Lang, editors, ECAI 2020 24th European Conference on Artificial Intelligence, 29 August-8 September 2020, Santiago de Compostela, Spain, August 29 September 8, 2020 Including 10th Conference on Prestigious Applications of Artificial Intelligence (PAIS 2020), volume 325 of Frontiers in Artificial Intelligence and Applications, pages 363–370. IOS Press, 2020. doi:10.3233/FAIA200114.
- [391] Ruixin Wang and Nicolas Barnier. Dynamic all-different and maximal cliques constraints for fixed job scheduling. In 35th IEEE International Conference on Tools with Artificial Intelligence, ICTAI 2023, Atlanta, GA, USA, November 6-8, 2023, pages 385–392. IEEE, 2023. doi:10.1109/ICTAI59109.2023.00062.
- [392] Tao Wang, Nadine Meskens, and David Duvivier. Scheduling operating theatres: Mixed integer programming vs. constraint programming. Eur. J. Oper. Res., 247(2):401-413, 2015. URL: https://doi.org/10.1016/j.ejor.2015.06.008, doi:10.1016/J.EJOR.2015.06.008.
- [393] Jean-Paul Watson and J. Christopher Beck. A hybrid constraint programming / local search approach to the job-shop scheduling problem. In Laurent Perron and Michael A. Trick, editors, Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems, 5th International Conference, CPAIOR 2008, Paris, France, May 20-23, 2008, Proceedings, volume 5015 of Lecture Notes in Computer Science, pages 263–277. Springer, 2008. doi:10.1007/978-3-540-68155-7_21.
- [394] Johan Wessén, Mats Carlsson, and Christian Schulte. Scheduling of dual-arm multi-tool assembly robots and workspace layout optimization. In Emmanuel Hebrard and Nysret Musliu, editors, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 17th International Conference, CPAIOR 2020, Vienna, Austria, September 21-24, 2020, Proceedings, volume 12296 of Lecture Notes in Computer Science, pages 511-520. Springer, 2020. doi:10.1007/978-3-030-58942-4_33.
- [395] Jaroslaw Wikarek and Pawel Sitek. A constraint-based declarative programming framework for scheduling and resource allocation problems. *Vietnam. J. Comput. Sci.*, 6(1):69–90, 2019. doi:10.1142/S2196888819500027.

- [396] Felix Winter, Sebastian Meiswinkel, Nysret Musliu, and Daniel Walkiewicz. Modeling and solving parallel machine scheduling with contamination constraints in the agricultural industry. In Christine Solnon, editor, 28th International Conference on Principles and Practice of Constraint Programming, CP 2022, July 31 to August 8, 2022, Haifa, Israel, volume 235 of LIPIcs, pages 41:1–41:18. Schloss Dagstuhl Leibniz-Zentrum für Informatik, 2022. URL: https://doi.org/10.4230/LIPIcs.CP.2022.41, doi:10.4230/LIPIcs.CP.2022.41.
- [397] Armin Wolf. Pruning while sweeping over task intervals. In Francesca Rossi, editor, Principles and Practice of Constraint Programming CP 2003, 9th International Conference, CP 2003, Kinsale, Ireland, September 29 October 3, 2003, Proceedings, volume 2833 of Lecture Notes in Computer Science, pages 739–753. Springer, 2003. doi:10.1007/978-3-540-45193-8_50.
- [398] Armin Wolf and Gunnar Schrader. $O(n \log n)$ overload checking for the cumulative constraint and its application. In Masanobu Umeda, Armin Wolf, Oskar Bartenstein, Ulrich Geske, Dietmar Seipel, and Osamu Takata, editors, Declarative Programming for Knowledge Management, 16th International Conference on Applications of Declarative Programming and Knowledge Management, INAP 2005, Fukuoka, Japan, October 22-24, 2005, Revised Selected Papers, volume 4369 of Lecture Notes in Computer Science, pages 88–101. Springer, 2005. doi:10.1007/11963578_8.
- [399] Christophe Wolinski, Krzysztof Kuchcinski, and Maya B. Gokhale. A constraints programming approach to communication scheduling on sope architectures. In 2004 Euromicro Symposium on Digital Systems Design (DSD 2004), Architectures, Methods and Tools, 31 August 3 September 2004, Rennes, France, pages 308–315. IEEE Computer Society, 2004. doi:10.1109/DSD.2004.1333291.
- [400] Christophe Wolinski, Krzysztof Kuchcinski, and Maya B. Gokhale. A constraints programming approach to communication scheduling on sope architectures. In Russell Tessier and Herman Schmit, editors, *Proceedings of the ACM/SIGDA 12th International Symposium on Field Programmable Gate Arrays, FPGA 2004, Monterey, California, USA, February 22-24, 2004*, page 252. ACM, 2004. doi:10.1145/968280.968336.
- [401] Christine Wei Wu, Kenneth N. Brown, and J. Christopher Beck. Scheduling with uncertain start dates. In Peter van Beek, editor, Principles and Practice of Constraint Programming CP 2005, 11th International Conference, CP 2005, Sitges, Spain, October 1-5, 2005, Proceedings, volume 3709 of Lecture Notes in Computer Science, page 872. Springer, 2005. doi:10.1007/11564751_110.
- [402] Moli Yang, Andreas Schutt, and Peter J. Stuckey. Time table edge finding with energy variables. In Louis-Martin Rousseau and Kostas Stergiou, editors, Integration of Constraint Programming, Artificial Intelligence, and Operations Research 16th International Conference, CPAIOR 2019, Thessaloniki, Greece, June 4-7, 2019, Proceedings, volume 11494 of Lecture Notes in Computer Science, pages 633-642. Springer, 2019. doi:10.1007/978-3-030-19212-9_42.
- [403] Kenneth D. Young, Thibaut Feydy, and Andreas Schutt. Constraint programming applied to the multi-skill project scheduling problem. In J. Christopher Beck, editor, Principles and Practice of Constraint Programming 23rd International Conference, CP 2017, Melbourne, VIC, Australia, August 28 September 1, 2017, Proceedings, volume 10416 of Lecture Notes in Computer Science, pages 308–317. Springer, 2017. doi:10.1007/978-3-319-66158-2_20.
- [404] Pinar Yunusoglu and Seyda Topaloglu Yildiz. Constraint programming approach for multi-resource-constrained unrelated parallel machine scheduling problem with sequence-dependent setup times. *Int. J. Prod. Res.*, 60(7):2212–2229, 2022. doi:10.1080/00207543.2021.1885068.
- [405] Francisco Yuraszeck, Gonzalo Mejía, and Dario Canut-de-Bon. A competitive constraint programming approach for the group shop scheduling problem. In Elhadi M. Shakshuki and Ansar-Ul-Haque Yasar, editors, The 14th International Conference on Ambient Systems, Networks and Technologies (ANT 2023) / The 6th International Conference on Emerging Data and Industry 4.0 (EDI40 2023) / Affiliated Workshops, March 15-17, 2023, Leuven, Belgium, volume 220 of Procedia Computer Science, pages 946–951. Elsevier, 2023. URL: https://doi.org/10.1016/j.procs.2023.03.130, doi:10.1016/J.PROCS.2023.03.130.
- [406] Francisco Yuraszeck, Elizabeth Montero, Dario Canut-de-Bon, Nicolás Cuneo, and Maximiliano Rojel. A constraint programming formulation of the multi-mode resource-constrained project scheduling problem for the flexible job shop scheduling problem. *IEEE Access*, 11:144928–144938, 2023. doi:10.1109/ACCESS.2023. 3345793.

- [407] M. H. Fazel Zarandi, H. Khorshidian, and Mohsen Akbarpour Shirazi. A constraint programming model for the scheduling of JIT cross-docking systems with preemption. J. Intell. Manuf., 27(2):297–313, 2016. URL: https://doi.org/10.1007/s10845-013-0860-9, doi:10.1007/S10845-013-0860-9.
- [408] Luis Zeballos and Gabriela P. Henning. A constraint programming approach to FMS scheduling. consideration of storage and transportation resources. *Inteligencia Artif.*, 9(26):39-48, 2005. URL: http://journal.iberamia.org/index.php/ia/article/view/452/article%20%281%29.pdf.
- [409] Luis Zeballos, Oscar Quiroga, and Gabriela P. Henning. A constraint programming model for the scheduling of flexible manufacturing systems with machine and tool limitations. Eng. Appl. Artif. Intell., 23(2):229–248, 2010. URL: https://doi.org/10.1016/j.engappai.2009.07.002, doi:10.1016/J.ENGAPPAI.2009.07.002.
- [410] Haotian Zhang, Yingjun Ji, Ziyan Zhao, and Shixin Liu. Constraint programming for modeling and solving a hybrid flow shop scheduling problem. In *IEEE International Conference on Networking, Sensing and Control, ICNSC 2022, Shanghai, China, December 15-18, 2022*, pages 1–6. IEEE, 2022. doi:10.1109/ICNSC55942.2022.10004154.
- [411] Luping Zhang, Chunxia Yu, and T. N. Wong. A graph-based constraint programming approach for the integrated process planning and scheduling problem. Comput. Oper. Res., 131:105282, 2021. URL: https://doi.org/10.1016/j.cor.2021.105282, doi:10.1016/J.COR.2021.105282.
- [412] Sicheng Zhang and Shouyang Wang. Flexible assembly job-shop scheduling with sequence-dependent setup times and part sharing in a dynamic environment: Constraint programming model, mixed-integer programming model, and dispatching rules. *IEEE Trans. Engineering Management*, 65(3):487–504, 2018. doi: 10.1109/TEM.2017.2785774.
- [413] Xujun Zhang, Zhimin Lv, and Xiaoqing Song. Model and solution for hot strip rolling scheduling problem based on constraint programming method. In 12th IEEE International Conference on Computer and Information Technology, CIT 2012, Chengdu, Sichuan, China, October 27-29, 2012, pages 412–415. IEEE Computer Society, 2012. doi:10.1109/CIT.2012.96.
- [414] Jianyang Zhou. A constraint program for solving the job-shop problem. In Eugene C. Freuder, editor, Proceedings of the Second International Conference on Principles and Practice of Constraint Programming, Cambridge, Massachusetts, USA, August 19-22, 1996, volume 1118 of Lecture Notes in Computer Science, pages 510–524. Springer, 1996. doi:10.1007/3-540-61551-2_97.
- [415] Jianyang Zhou. A permutation-based approach for solving the job-shop problem. Constraints An Int. J., 2(2):185–213, 1997. doi:10.1023/A:1009757726572.
- [416] Jinlian Zhou, Ying Guo, and Guipeng Li. On complex hybrid flexible flowshop scheduling problems based on constraint programming. In 12th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2015, Zhangjiajie, China, August 15-17, 2015, pages 909-913. IEEE, 2015. doi:10.1109/FSKD. 2015.7382064.
- [417] Kenny Qili Zhu and Andrew E. Santosa. A meeting scheduling system based on open constraint programming. In Anne Banks Pidduck, John Mylopoulos, Carson C. Woo, and M. Tamer Özsu, editors, Advanced Information Systems Engineering, 14th International Conference, CAiSE 2002, Toronto, Canada, May 27-31, 2002, Proceedings, volume 2348 of Lecture Notes in Computer Science, pages 792-796. Springer, 2002. doi:10.1007/3-540-47961-9_69.
- [418] Minhaz F. Zibran and Chanchal K. Roy. Conflict-aware optimal scheduling of code clone refactoring: A constraint programming approach. In *The 19th IEEE International Conference on Program Comprehension, ICPC 2011, Kingston, ON, Canada, June 22-24, 2011*, pages 266–269. IEEE Computer Society, 2011. doi:10.1109/ICPC.2011.45.
- [419] Minhaz F. Zibran and Chanchal K. Roy. A constraint programming approach to conflict-aware optimal scheduling of prioritized code clone refactoring. In 11th IEEE Working Conference on Source Code Analysis and Manipulation, SCAM 2011, Williamsburg, VA, USA, September 25-26, 2011, pages 105-114. IEEE Computer Society, 2011. doi:10.1109/SCAM.2011.21.