# CP Papers on Scheduling

### Helmut Simonis and Cemalettin Öztürk

#### February 14, 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		[1]	2023	CP 2023	16
Bit-Monnot23 Bit- Monnot23	A. Bit-Monnot	Enhancing Hybrid CP-SAT Search for Disjunctive Scheduling		[55]	2023	ECAI 2023	8
EfthymiouY23 EfthymiouY23	N. Efthymiou, N. Yorke-Smith	Predicting the Optimal Period for Cyclic Hoist Scheduling Problems		[106]	2023	CPAIOR 2023	16
JuvinHHL23 Juvin- HHL23	C. Juvin, E. Hebrard, L. Houssin, P. Lopez	An Efficient Constraint Programming Approach to Pre- emptive Job Shop Scheduling		[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		[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		[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		[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		[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		[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		[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		[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		[354]	2023	CPAIOR 2023	18

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
TasselGS23 TasselGS23	P. Tassel, M. Gebser, K. Schekotihin	An End-to-End Reinforcement Learning Approach for Job-Shop Scheduling Problems Based on Constraint Programming		[355]	2023	ICAPS 2023	9
WangB23 WangB23	R. Wang, N. Barnier	Dynamic All-Different and Maximal Cliques Constraints for Fixed Job Scheduling		[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		[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		[14]	2022	CPAIOR 2022	13
BoudreaultSLQ22 BoudreaultSLQ22	R. Boudreault, V. Simard, D. Lafond, C. Quimper	A Constraint Programming Approach to Ship Refit Project Scheduling		[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		[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		[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		[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		[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
WinterMMW22 Winter- MMW22	F. Winter, S. Meiswinkel, N. Musliu, D. Walkiewicz	Modeling and Solving Parallel Machine Scheduling with Contamination Constraints in the Agricultural Industry		[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		[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		[11]	2021	CP 2021	16
ArmstrongGOS21 ArmstrongGOS21	E. Armstrong, M. Garraffa, B. O'Sullivan, H. Simonis	The Hybrid Flexible Flowshop with Transportation Times		[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		[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		[47]	2021	ICCL 2021	16
GeibingerKKMMW21 GeibingerKKMMW21	T. Geibinger, L. Kletzander, M. Krainz, F. Mischek, N. Musliu, F. Winter	Physician Scheduling During a Pandemic		[133]	2021	CPAIOR 2021	10
GeibingerMM21 GeibingerMM21	T. Geibinger, F. Mischek, N. Musliu	Constraint Logic Programming for Real-World Test Laboratory Scheduling		[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		[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		[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		[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		[215]	2021	CP 2021	17

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
LacknerMMWW21 LacknerMMWW21	M. Lackner, C. Mrkvicka, N. Musliu, D. Walkiewicz, F. Winter	Minimizing Cumulative Batch Processing Time for an Industrial Oven Scheduling Problem		[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		[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		[143]	2020	AAAI 2020	8
GroleazNS20 GroleazNS20	L. Groleaz, Samba Ndojh Ndiaye, C. Solnon	Solving the Group Cumulative Scheduling Problem with CPO and ACO		[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		[263]	2020	CPAIOR 2020	13
NattafM20 NattafM20	M. Nattaf, A. Malapert	Filtering Rules for Flow Time Minimization in a Parallel Machine Scheduling Problem		[278]	2020	CP 2020	16
TangB20 TangB20	Tanya Y. Tang, J. Christopher Beck	CP and Hybrid Models for Two-Stage Batching and Scheduling		[352]	2020	CPAIOR 2020	16
WangB20 WangB20	R. Wang, N. Barnier	Global Propagation of Transition Cost for Fixed Job Scheduling		[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		[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		[40]	2019	ICRA 2019	7
BogaerdtW19 BogaerdtW19	Pim van den Bogaerdt, Mathijs de Weerdt	Lower Bounds for Uniform Machine Scheduling Using Decision Diagrams		[371]	2019	CPAIOR 2019	16
ColT19 ColT19	Giacomo Da Col, Erich Christian Teppan	Industrial Size Job Shop Scheduling Tackled by Present Day CP Solvers		[83]	2019	CP 2019	17
FrimodigS19 FrimodigS19	S. Frimodig, C. Schulte	Models for Radiation Therapy Patient Scheduling		[121]	2019	CP 2019	17
FrohnerTR19 Frohn- erTR19	N. Frohner, S. Teuschl, Günther R. Raidl	Casual Employee Scheduling with Constraint Programming and Metaheuristics		[122]	2019	EUROCAST 2019	9
GalleguillosKSB19 GalleguillosKSB19	C. Galleguillos, Z. Kiziltan, A. Sîrbu, Özalp Babaoglu	Constraint Programming-Based Job Dispatching for Modern HPC Applications		[124]	2019	CP 2019	18
GeibingerMM19 GeibingerMM19	T. Geibinger, F. Mischek, N. Musliu	Investigating Constraint Programming for Real World Industrial Test Laboratory Scheduling		[135]	2019	CPAIOR 2019	16
LiuLH19 LiuLH19	K. Liu, S. Löffler, P. Hofstedt	Solving the Talent Scheduling Problem by Parallel Constraint Programming		[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		[254]	2019	CPAIOR 2019	17
MurinR19 MurinR19	S. Murín, H. Rudová	Scheduling of Mobile Robots Using Constraint Programming		[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		[297]	2019	RAAD 2019	8
Tom19 Tom19	M. Tom	Fuzzy Multi-Constraint Programming Model for Weekly Meals Scheduling		[363]	2019	FUZZ-IEEE 2019	6
YangSS19 YangSS19	M. Yang, A. Schutt, Peter J. Stuckey	Time Table Edge Finding with Energy Variables		[402]	2019	CPAIOR 2019	10
ArbaouiY18 ArbaouiY18	T. Arbaoui, F. Yalaoui	Solving the Unrelated Parallel Machine Scheduling Prob- lem with Additional Resources Using Constraint Pro- gramming		[12]	2018	ACIIDS 2018	10
AstrandJZ18 AstrandJZ18	M. Åstrand, M. Johansson, A. Zanarini	Fleet Scheduling in Underground Mines Using Constraint Programming		[21]	2018	CPAIOR 2018	9

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
BenediktSMVH18 BenediktSMVH18	O. Benedikt, P. Sucha, I. Módos, M. Vlk, Z. Hanzálek	Energy-Aware Production Scheduling with Power-Saving Modes		[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		[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		[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		[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		[221]	2018	CPAIOR 2018	9
NishikawaSTT18 NishikawaSTT18	H. Nishikawa, K. Shimada, I. Taniguchi, H. Tomiyama	Scheduling of Malleable Fork-Join Tasks with Constraint Programming		[280]	2018	CANDAR 2018	6
NishikawaSTT18a NishikawaSTT18a	H. Nishikawa, K. Shimada, I. Taniguchi, H. Tomiyama	Scheduling of Malleable Tasks Based on Constraint Programming		[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		[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		[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		[57]	2017	CP 2017	9
CappartS17 CappartS17	Q. Cappart, P. Schaus	Rescheduling Railway Traffic on Real Time Situations Using Time-Interval Variables		[73]	2017	CPAIOR 2017	16
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		[138]	2017	CPAIOR 2017	16
GoldwaserS17 Gold- waserS17	A. Goldwaser, A. Schutt	Optimal Torpedo Scheduling		[146]	2017	CP 2017	16
Hooker17 Hooker17	John N. Hooker	Job Sequencing Bounds from Decision Diagrams		[181]	2017	CP 2017	14
KletzanderM17 KletzanderM17	L. Kletzander, N. Musliu	A Multi-stage Simulated Annealing Algorithm for the Torpedo Scheduling Problem		[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		[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		[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		[269]	2017	CP 2017	18
Pralet17 Pralet17	C. Pralet	An Incomplete Constraint-Based System for Scheduling with Renewable Resources		[310]	2017	CP 2017	19
YoungFS17 YoungFS17	Kenneth D. Young, T. Feydy, A. Schutt	Constraint Programming Applied to the Multi-Skill Project Scheduling Problem		[403]	2017	CP 2017	10
BonfiettiZLM16 Bonfiet- tiZLM16	A. Bonfietti, A. Zanarini, M. Lombardi, M. Milano	The Multirate Resource Constraint		[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		[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		[76]	2016	CP 2016	16
FontaineMH16 FontaineMH16	D. Fontaine, Laurent D. Michel, Pascal Van Hentenryck	Parallel Composition of Scheduling Solvers		[117]	2016	CPAIOR 2016	11
GilesH16 GilesH16	K. Giles, Willem-Jan van Hoeve	Solving a Supply-Delivery Scheduling Problem with Constraint Programming		[140]	2016	CP 2016	16

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
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		[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		[234]	2016	CP 2016	18
Madi-WambaB16 Madi- WambaB16	G. Madi-Wamba, N. Beldiceanu	The TaskIntersection Constraint		[251]	2016	CPAIOR 2016	16
SchuttS16 SchuttS16 SzerediS16 SzerediS16	A. Schutt, Peter J. Stuckey R. Szeredi, A. Schutt	Explaining Producer/Consumer Constraints Modelling and Solving Multi-mode Resource-Constrained Project Scheduling		[333] [351]	2016 2016	CP 2016 CP 2016	17 10
Tesch16 Tesch16	A. Tesch	A Nearly Exact Propagation Algorithm for Energetic Reasoning in \mathcal O(n^2 \log n)		[359]	2016	CP 2016	27
BofillGSV15 Bofill- GSV15	M. Bofill, M. Garcia, J. Suy, M. Villaret	MaxSAT-Based Scheduling of B2B Meetings		[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		[70]	2015	CPAIOR 2015	17
DejemeppeCS15 DejemeppeCS15	C. Dejemeppe, Sascha Van Cauwelaert, P. Schaus	The Unary Resource with Transition Times		[92]	2015	CP 2015	16
EvenSH15 EvenSH15	C. Even, A. Schutt, Pascal Van Hentenryck	A Constraint Programming Approach for Non-preemptive Evacuation Scheduling		[111]	2015	CP 2015	18
GayHLS15 GayHLS15 GayHS15 GayHS15	S. Gay, R. Hartert, C. Lecoutre, P. Schaus S. Gay, R. Hartert, P. Schaus	Conflict Ordering Search for Scheduling Problems Simple and Scalable Time-Table Filtering for the Cumulative Constraint		[128] [129]	2015 2015	CP 2015 CP 2015	9
KreterSS15 KreterSS15	S. Kreter, A. Schutt, Peter J. Stuckey	Modeling and Solving Project Scheduling with Calendars		[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		[235]	2015	CPAIOR 2015	15
LombardiBM15 Lom- bardiBM15	M. Lombardi, A. Bonfietti, M. Milano	Deterministic Estimation of the Expected Makespan of a POS Under Duration Uncertainty		[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		[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		[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		[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		[311]	2015	CP 2015	16
SialaAH15 SialaAH15	M. Siala, C. Artigues, E. Hebrard	Two Clause Learning Approaches for Disjunctive Scheduling		[340]	2015	CP 2015	10
VilimLS15 VilimLS15	P. Vilím, P. Laborie, P. Shaw	Failure-Directed Search for Constraint-Based Scheduling		[385]	2015	CPAIOR 2015	17
ZhouGL15 ZhouGL15	J. Zhou, Y. Guo, G. Li	On complex hybrid flexible flowshop scheduling problems based on constraint programming		[416]	2015	FSKD 2015	5
cpaior-GayHS15 cpaior- GayHS15	S. Gay, R. Hartert, P. Schaus	Time-Table Disjunctive Reasoning for the Cumulative Constraint		[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		[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		[35]	2014	CP 2014	16
BessiereHMQW14 BessiereHMQW14	C. Bessiere, E. Hebrard, M. Ménard, C. Quimper, T. Walsh	Buffered Resource Constraint: Algorithms and Complexity		[53]	2014	CPAIOR 2014	16
BofillEGPSV14 Bofil- lEGPSV14	M. Bofill, J. Espasa, M. Garcia, M. Palahí, J. Suy, M. Villaret	Scheduling B2B Meetings		[58]	2014	CP 2014	16
BonfiettiLM14 BonfiettiLM14	A. Bonfietti, M. Lombardi, M. Milano	Disregarding Duration Uncertainty in Partial Order Schedules? Yes, We Can!		[63]	2014	CPAIOR 2014	16

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
DejemeppeD14 DejemeppeD14	C. Dejemeppe, Y. Deville	Continuously Degrading Resource and Interval Dependent Activity Durations in Nuclear Medicine Patient Scheduling		[93]	2014	CPAIOR 2014	9
DerrienP14 DerrienP14	A. Derrien, T. Petit	A New Characterization of Relevant Intervals for Energetic Reasoning		[97]	2014	CP 2014	9
DerrienPZ14 DerrienPZ14	A. Derrien, T. Petit, S. Zampelli	A Declarative Paradigm for Robust Cumulative Scheduling		[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		[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		[131]	2014	CP 2014	15
HoundjiSWD14 Hound- iiSWD14	Vinasétan Ratheil Houndji, P. Schaus, Laurence A. Wolsey, Y. Deville	The StockingCost Constraint		[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		[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		[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		[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		[165]	2013	CPAIOR 2013	16
KelarevaTK13 KelarevaTK13	E. Kelareva, K. Tierney, P. Kilby	CP Methods for Scheduling and Routing with Time- Dependent Task Costs		[197]	2013	CPAIOR 2013	17
LetortCB13 LetortCB13	A. Letort, M. Carlsson, N. Beldiceanu	A Synchronized Sweep Algorithm for the k-dimensional cumulative Constraint		[229]	2013	CPAIOR 2013	16
OuelletQ13 OuelletQ13	P. Ouellet, C. Quimper	Time-Table Extended-Edge-Finding for the Cumulative Constraint		[289]	2013	CP 2013	16
SchuttFS13 SchuttFS13	A. Schutt, T. Feydy, Peter J. Stuckey	Scheduling Optional Tasks with Explanation		[330]	2013	CP 2013	17
cpaior-SchuttFS13 cpaior-SchuttFS13	A. Schutt, T. Feydy, Peter J. Stuckey	Explaining Time-Table-Edge-Finding Propagation for the Cumulative Resource Constraint		[329]	2013	CPAIOR 2013	17
BillautHL12 BillautHL12	J. Billaut, E. Hebrard, P. Lopez	Complete Characterization of Near-Optimal Sequences for the Two-Machine Flow Shop Scheduling Problem		[54]	2012	CPAIOR 2012	15
BonfiettiLBM12 BonfiettiLBM12	A. Bonfietti, M. Lombardi, L. Benini, M. Milano	Global Cyclic Cumulative Constraint		[62]	2012	CPAIOR 2012	16
HeinzB12 HeinzB12	S. Heinz, J. Christopher Beck	Reconsidering Mixed Integer Programming and MIP- Based Hybrids for Scheduling		[164]	2012	CPAIOR 2012	17
IfrimOS12 IfrimOS12	G. Ifrim, B. O'Sullivan, H. Simonis	Properties of Energy-Price Forecasts for Scheduling		[185]	2012	CP 2012	16
LetortBC12 LetortBC12	A. Letort, N. Beldiceanu, M. Carlsson	A Scalable Sweep Algorithm for the cumulative Constraint		[228]	2012	CP 2012	16
RendlPHPR12 RendlPHPR12	A. Rendl, M. Prandtstetter, G. Hiermann, J. Puchinger, Günther R. Raidl	Hybrid Heuristics for Multimodal Homecare Scheduling		[318]	2012	CPAIOR 2012	17
SchuttCSW12 SchuttCSW12	A. Schutt, G. Chu, Peter J. Stuckey, Mark G. Wallace	Maximising the Net Present Value for Resource- Constrained Project Scheduling		[328]	2012	CPAIOR 2012	17
SerraNM12 SerraNM12	T. Serra, G. Nishioka, Fernando J. M. Marcellino	The Offshore Resources Scheduling Problem: Detailing a Constraint Programming Approach		[335]	2012	CP 2012	17
SimoninAHL12 SimoninAHL12	G. Simonin, C. Artigues, E. Hebrard, P. Lopez	Scheduling Scientific Experiments on the Rosetta/Philae Mission		[341]	2012	CP 2012	15
ZhangLS12 ZhangLS12	X. Zhang, Z. Lv, X. Song	Model and Solution for Hot Strip Rolling Scheduling Problem Based on Constraint Programming Method		[413]	2012	CIT 2012	4
BonfiettiLBM11 BonfiettiLBM11	A. Bonfietti, M. Lombardi, L. Benini, M. Milano	A Constraint Based Approach to Cyclic RCPSP		[61]	2011	CP 2011	15
ChapadosJR11 ChapadosJR11	N. Chapados, M. Joliveau, L. Rousseau	Retail Store Workforce Scheduling by Expected Operating Income Maximization		[78]	2011	CPAIOR 2011	6

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
ClercqPBJ11 Clerc- qPBJ11	Alexis De Clercq, T. Petit, N. Beldiceanu, N. Jussien	Filtering Algorithms for Discrete Cumulative Problems with Overloads of Resource		[81]	2011	CP 2011	16
EdisO11 EdisO11	Emrah B. Edis, C. Oguz	Parallel Machine Scheduling with Additional Resources: A Lagrangian-Based Constraint Programming Approach		[105]	2011	CPAIOR 2011	7
GrimesH11 GrimesH11	D. Grimes, E. Hebrard	Models and Strategies for Variants of the Job Shop Scheduling Problem		[150]	2011	CP 2011	17
HeinzS11 HeinzS11	S. Heinz, J. Schulz	Explanations for the Cumulative Constraint: An Experimental Study		[167]	2011	SEA 2011	10
HermenierDL11 HermenierDL11	F. Hermenier, S. Demassey, X. Lorca	Bin Repacking Scheduling in Virtualized Datacenters	•	[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	•	[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	l	[225]	2011	CPAIOR 2011	14
LombardiBMB11 Lom- bardiBMB11	M. Lombardi, A. Bonfietti, M. Milano, L. Benini	Precedence Constraint Posting for Cyclic Scheduling Problems		[242]	2011	CPAIOR 2011	17
Vilim11 Vilim11	P. Vilím	Timetable Edge Finding Filtering Algorithm for Discrete Cumulative Resources		[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	·	[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		[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		[52]	2010	CPAIOR 2010	5
CobanH10 CobanH10	E. Coban, John N. Hooker	Single-Facility Scheduling over Long Time Horizons by Logic-Based Benders Decomposition		[82]	2010	CPAIOR 2010	5
Davenport10 Davenport10	Andrew J. Davenport	Integrated Maintenance Scheduling for Semiconductor Manufacturing		[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		[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		[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	[	[334]	2010	CP 2010	15
SunLYL10 SunLYL10	Z. Sun, H. Li, M. Yao, N. Li	Scheduling Optimization Techniques for FlexRay Using Constraint-Programming		[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		[4]	2009	CPAIOR 2009	2
AronssonBK09 AronssonBK09	M. Aronsson, M. Bohlin, P. Kreuger	MILP formulations of cumulative constraints for railway scheduling - A comparative study		[15]	2009	ATMOS 2009	null
Baptiste09 Baptiste09	P. Baptiste	Constraint-Based Schedulers, Do They Really Work?		[25]	2009	CP 2009	1
GrimesHM09 GrimesHM09	D. Grimes, E. Hebrard, A. Malapert	Closing the Open Shop: Contradicting Conventional Wisdom	•	[151]	2009	CP 2009	9
Laborie09 Laborie09	P. Laborie	IBM ILOG CP Optimizer for Detailed Scheduling Illustrated on Three Problems	•	[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		[243]	2009	CP 2009	15
MonetteDH09 Monet- teDH09	J. Monette, Y. Deville, Pascal Van Hentenryck	Just-In-Time Scheduling with Constraint Programming	•	[266]	2009	ICAPS 2009	null
SchuttFSW09 SchuttFSW09	A. Schutt, T. Feydy, Peter J. Stuckey, M. Wallace	Why Cumulative Decomposition Is Not as Bad as It Sounds		[331]	2009	CP 2009	16

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
ThiruvadyBME09 ThiruvadyBME09	Dhananjay R. Thiruvady, C. Blum, B. Meyer, Andreas T. Ernst	Hybridizing Beam-ACO with Constraint Programming for Single Machine Job Scheduling		[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)		[380]	2009	CP 2009	15
cpaior-Vilim09 cpaior- Vilim09	P. Vilím	Max Energy Filtering Algorithm for Discrete Cumulative Resources		[381]	2009	CPAIOR 2009	15
BarlattCG08 Bar- lattCG08	A. Barlatt, Amy Mainville Cohn, Oleg Yu. Gusikhin	A Hybrid Approach for Solving Shift-Selection and Task-Sequencing Problems		[31]	2008	CPAIOR 2008	5
BeldiceanuCP08 BeldiceanuCP08	N. Beldiceanu, M. Carlsson, E. Poder	New Filtering for the cumulative Constraint in the Context of Non-Overlapping Rectangles		[44]	2008	CPAIOR 2008	15
DoomsH08 DoomsH08	G. Dooms, Pascal Van Hentenryck	Gap Reduction Techniques for Online Stochastic Project Scheduling		[102]	2008	CPAIOR 2008	16
HentenryckM08 HentenryckM08	Pascal Van Hentenryck, L. Michel	The Steel Mill Slab Design Problem Revisited		[173]	2008	CPAIOR 2008	5
LauLN08 LauLN08	Hoong Chuin Lau, Kong Wei Lye, Viet Bang Nguyen	A Combinatorial Auction Framework for Solving Decentralized Scheduling Problems (Extended Abstract)		[226]	2008	CPAIOR 2008	5
MouraSCL08 MouraSCL08	Arnaldo Vieira Moura, Cid C. de Souza, André A. Ciré, Tony Minoru Tamura Lopes	Planning and Scheduling the Operation of a Very Large Oil Pipeline Network		[271]	2008	CP 2008	16
MouraSCL08a MouraSCL08a	Arnaldo Vieira Moura, Cid C. de Souza, André A. Ciré, Tony Minoru Tamura Lopes	Heuristics and Constraint Programming Hybridizations for a Real Pipeline Planning and Scheduling Problem		[270]	2008	CSE 2008	8
PoderB08 PoderB08	E. Poder, N. Beldiceanu	Filtering for a Continuous Multi-Resources cumulative Constraint with Resource Consumption and Production	NO	[303]	2008	ICAPS 2008	8
WatsonB08 WatsonB08	J. Watson, J. Christopher Beck	A Hybrid Constraint Programming / Local Search Approach to the Job-Shop Scheduling Problem		[393]	2008	CPAIOR 2008	15
AkkerDH07 AkkerDH07	J. M. van den Akker, G. Diepen, J. A. Hoogeveen	A Column Generation Based Destructive Lower Bound for Resource Constrained Project Scheduling Problems		[370]	2007	CPAIOR 2007	15
BeldiceanuP07 BeldiceanuP07	N. Beldiceanu, E. Poder	A Continuous Multi-resources cumulative Constraint with Positive-Negative Resource Consumption-Production		[45]	2007	CPAIOR 2007	15
DavenportKRSH07 Dav- enportKRSH07	Andrew J. Davenport, J. Kalagnanam, C. Reddy, S. Siegel, J. Hou	An Application of Constraint Programming to Generating Detailed Operations Schedules for Steel Manufacturing		[88]	2007	CP 2007	13
GarganiR07 GarganiR07	A. Gargani, P. Refalo	An Efficient Model and Strategy for the Steel Mill Slab Design Problem		[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		[199]	2007	CPAIOR 2007	14
KrogtLPHJ07 KrogtLPHJ07	Roman van der Krogt, J. Little, K. Pulliam, S. Hanhilammi, Y. Jin	Scheduling for Cellular Manufacturing		[372]	2007	CP 2007	13
Limtanyakul07 Lim- tanyakul07	K. Limtanyakul	Scheduling of Tests on Vehicle Prototypes Using Constraint and Integer Programming		[236]	2007	GOR 2007	6
MonetteDD07 Monet- teDD07	J. Monette, Y. Deville, P. Dupont	A Position-Based Propagator for the Open-Shop Problem		[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		[321]	2007	CPAIOR 2007	15
BeniniBGM06 BeniniBGM06	L. Benini, D. Bertozzi, A. Guerri, M. Milano	Allocation, Scheduling and Voltage Scaling on Energy Aware MPSoCs		[50]	2006	CPAIOR 2006	15
GomesHS06 GomesHS06	Carla P. Gomes, Willem Jan van Hoeve, B. Selman	Constraint Programming for Distributed Planning and Scheduling		[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		[201]	2006	CP 2006	13
KovacsV06 KovacsV06	A. Kovács, J. Váncza	Progressive Solutions: A Simple but Efficient Dominance Rule for Practical RCPSP		[214]	2006	CPAIOR 2006	13
LiuJ06 LiuJ06	Y. Liu, Y. Jiang	LP-TPOP: Integrating Planning and Scheduling Through Constraint Programming		[240]	2006	PRICAI 2006	5

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
QuSN06 QuSN06	Y. Qu, J. Soininen, J. Nurmi	Using Constraint Programming to Achieve Optimal Prefetch Scheduling for Dependent Tasks on Run-Time Reconfigurable Devices		[316]	2006	SoC 2006	4
AbrilSB05 AbrilSB05	M. Abril, Miguel A. Salido, F. Barber	Distributed Constraints for Large-Scale Scheduling Problems		[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		[18]	2005	CP 2005	15
CarchraeBF05 CarchraeBF05	T. Carchrae, J. Christopher Beck, Eugene C. Freuder	Methods to Learn Abstract Scheduling Models		[74]	2005	CP 2005	1
ChuX05 ChuX05	Y. Chu, Q. Xia	A Hybrid Algorithm for a Class of Resource Constrained Scheduling Problems		[79]	2005	CPAIOR 2005	15
DilkinaDH05 Dilki- naDH05	B. Dilkina, L. Duan, William S. Havens	Extending Systematic Local Search for Job Shop Scheduling Problems		[100]	2005	CP 2005	5
FortinZDF05 Fort- inZDF05	J. Fortin, P. Zielinski, D. Dubois, H. Fargier	Interval Analysis in Scheduling		[118]	2005	CP 2005	15
FrankK05 FrankK05	J. Frank, E. Kürklü	Mixed Discrete and Continuous Algorithms for Scheduling Airborne Astronomy Observations		[119]	2005	CPAIOR 2005	18
Geske05 Geske05	U. Geske	Railway Scheduling with Declarative Constraint Programming		[139]	2005	INAP 2005	18
HebrardTW05 HebrardTW05	E. Hebrard, P. Tyler, T. Walsh	Computing Super-Schedules		[162]	2005	CP 2005	1
KovacsEKV05 KovacsEKV05	A. Kovács, P. Egri, T. Kis, J. Váncza	Proterv-II: An Integrated Production Planning and Scheduling System		[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		[317]	2005	ICRA 2005	6
Vilim05 Vilim05	P. Vilím	Computing Explanations for the Unary Resource Constraint		[379]	2005	CPAIOR 2005	14
WolfS05 WolfS05	A. Wolf, G. Schrader	$O(n \log n)$ Overload Checking for the Cumulative Constraint and Its Application		[398]	2005	INAP 2005	14
WuBB05 WuBB05	Christine Wei Wu, Kenneth N. Brown, J. Christopher Beck	Scheduling with Uncertain Start Dates		[401]	2005	CP 2005	1
cp-Hooker05 cp- Hooker05	John N. Hooker	Planning and Scheduling to Minimize Tardiness		[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		[16]	2004	CPAIOR 2004	13
HentenryckM04 HentenryckM04	Pascal Van Hentenryck, L. Michel	Scheduling Abstractions for Local Search		[172]	2004	CPAIOR 2004	16
Hooker04 Hooker04	John N. Hooker	A Hybrid Method for Planning and Scheduling		[177]	2004	CP 2004	12
KovacsV04 KovacsV04	A. Kovács, J. Váncza	Completable Partial Solutions in Constraint Programming and Constraint-Based Scheduling		[213]	2004	CP 2004	15
LimRX04 LimRX04	A. Lim, B. Rodrigues, Z. Xu	Solving the Crane Scheduling Problem Using Intelligent Search Schemes		[233]	2004	CP 2004	5
MaraveliasG04 MaraveliasG04	Christos T. Maravelias, Ignacio E. Grossmann	Using MILP and CP for the Scheduling of Batch Chemical Processes		[257]	2004	CPAIOR 2004	20
Sadykov04 Sadykov04	R. Sadykov	A Hybrid Branch-And-Cut Algorithm for the One- Machine Scheduling Problem		[323]	2004	CPAIOR 2004	7
Vilim04 Vilim04	P. Vilím	O(n log n) Filtering Algorithms for Unary Resource Constraint		[378]	2004	CPAIOR 2004	13
VilimBC04 VilimBC04 VillaverdeP04	P. Vilím, R. Barták, O. Cepek K. Villaverde, E. Pontelli	Unary Resource Constraint with Optional Activities An Investigation of Scheduling in Distributed Constraint	NO	[383] [386]	$\frac{2004}{2004}$	CP 2004 ISCA 2004	15 6
VillaverdeP04 WolinskiKG04 Wolin-	C. Wolinski, K. Kuchcinski, Maya B. Gokhale	Logic Programming A Constraints Programming Approach to Communication		[399]	2004	DSD 2004	8
skiKG04 WolinskiKG04a Wolin- skiKG04a	C. Wolinski, K. Kuchcinski, Maya B. Gokhale	Scheduling on SoPC Architectures A constraints programming approach to communication scheduling on SoPC architectures	NO	[400]	2004	FPGA 2004	1

		Table 1: Papers from bibtex					
Key	Authors	Title	LC	Cite	Year	Conference	Pages
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		[85]	2003	CP 2003	5
Kumar03 Kumar03	T. K. Satish Kumar	Incremental Computation of Resource-Envelopes in Producer-Consumer Models		[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		[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		[369]	2003	KES 2003	8
Vilim03 Vilim03	P. Vilím	Computing Explanations for Global Scheduling Constraints		[377]	2003	CP 2003	1
Wolf03 Wolf03	A. Wolf	Pruning while Sweeping over Task Intervals		[397]	2003	CP 2003	15
Bartak02 Bartak02	R. Barták	Visopt ShopFloor: On the Edge of Planning and Schedul-		[33]	2002	CP 2002	16
		ing		[00]			
Bartak02a Bartak02a	R. Barták	Visopt ShopFloor: Going Beyond Traditional Scheduling		[32]	2002	ERCIM/CologNet 2002	15
BeldiceanuC02	N. Beldiceanu, M. Carlsson	A New Multi-resource cumulatives Constraint with Neg-		[42]	2002	CP 2002	17
BeldiceanuC02	,	ative Heights		. ,			
ElkhyariGJ02 ElkhyariGJ02	A. Elkhyari, C. Guéret, N. Jussien	Conflict-Based Repair Techniques for Solving Dynamic Scheduling Problems		[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		[108]	2002	PATAT 2002	24
HookerY02 HookerY02	John N. Hooker, H. Yan	A Relaxation of the Cumulative Constraint		[182]	2002	CP 2002	5
KamarainenS02 KamarainenS02	O. Kamarainen, Hani El Sakkout	Local Probing Applied to Scheduling		[190]	2002	CP 2002	17
Muscettola02 Muscettola02	N. Muscettola	Computing the Envelope for Stepwise-Constant Resource Allocations		[275]	2002	CP 2002	16
Vilim02 Vilim02	P. Vilím	Batch Processing with Sequence Dependent Setup Times		[376]	2002	CP 2002	1
ZhuS02 ZhuS02	Kenny Qili Zhu, Andrew E. Santosa	A Meeting Scheduling System Based on Open Constraint Programming		[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		[375]	2001	CP 2001	15
AngelsmarkJ00 Angels- markJ00	O. Angelsmark, P. Jonsson	Some Observations on Durations, Scheduling and Allen's Algebra		[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		[206]	1999	ECC 1999	8
CestaOS98 CestaOS98	A. Cesta, A. Oddi, Stephen F. Smith	Scheduling Multi-capacitated Resources Under Complex Temporal Constraints		[77]	1998	CP 1998	1
FrostD98 FrostD98	D. Frost, R. Dechter	Optimizing with Constraints: A Case Study in Scheduling Maintenance of Electric Power Units		[123]	1998	CP 1998	1
GruianK98 GruianK98	F. Gruian, K. Kuchcinski	Operation Binding and Scheduling for Low Power Using Constraint Logic Programming		[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 Ro- dosekW98	R. Rodosek, M. Wallace	A Generic Model and Hybrid Algorithm for Hoist Scheduling Problems		[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		[28]	1997	CP 1997	15
BeckDF97 BeckDF97	J. Christopher Beck, Andrew J. Davenport, Mark S. Fox	Five Pitfalls of Empirical Scheduling Research		[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

Table 1: Papers from bibtex									
Key	Authors	Title	LC	Cite	Year	Conference	Pages		
Caseau97 Caseau97	Y. Caseau	Using Constraint Propagation for Complex Scheduling Problems: Managing Size, Complex Resources and Travel		[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		[84]	1996	CP 1996	15		
Zhou96 Zhou96	J. Zhou	A Constraint Program for Solving the Job-Shop Problem		[414]	1996	CP 1996	15		
Goltz95 Goltz95	H. Goltz	Reducing Domains for Search in CLP(FD) and Its Application to Job-Shop Scheduling		[147]	1995	CP 1995	14		
Puget95 Puget95	J. Puget	Applications of Constraint Programming		[313]	1995	CP 1995	4		
Simonis95 Simonis95	H. Simonis	The CHIP System and Its Applications		[343]	1995	CP 1995	4		
SimonisC95 SimonisC95	H. Simonis, T. Cornelissens	Modelling Producer/Consumer Constraints		[345]	1995	CP 1995	14		
Touraivane95 Touraivane95	Touraïvane	Constraint Programming and Industrial Applications		[366]	1995	CP 1995	3		
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		[30]	1992	ICRA 1992	6		
ErtlK91 ErtlK91	M. Anton Ertl, A. Krall	Optimal Instruction Scheduling using Constraint Logic Programming		[109]	1991	PLILP 1991	12		

## 3 Journal Articles

		Table 2: 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		[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		[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		[7]	2023	IEEE Access	16
Caballero23 Caballero23	Jordi Coll Caballero	Scheduling through logic-based tools		[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		[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		[186]	2023	Soft Comput.	28
LacknerMMWW23 LacknerMMWW23	M. Lackner, C. Mrkvicka, N. Musliu, D. Walkiewicz, F. Winter	Exact methods for the Oven Scheduling Problem		[224]	2023	Constraints An Int. J.	42
MontemanniD23 MontemanniD23	R. Montemanni, M. Dell'Amico	Solving the Parallel Drone Scheduling Traveling Salesman Problem via Constraint Programming		[268]	2023	Algorithms	1
MontemanniD23a MontemanniD23a	R. Montemanni, M. Dell'Amico	Constraint programming models for the parallel drone scheduling vehicle routing problem		[267]	2023	EURO J. Comput. Optim.	1

		Table 2: Articles from bibtex					
Key	Authors	Title	LC	Cite	Year	Journal	Pages
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		[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		[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		[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		[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		[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		[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		[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		[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		[272]	2022	Eur. J. Oper. Res.	18
PohlAK22 PohlAK22	M. Pohl, C. Artigues, R. Kolisch	Solving the time-discrete winter runway scheduling prob- lem: A column generation and constraint programming approach		[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		[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		[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		[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		[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		[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		[205]	2021	Constraints An Int. J.	51

		Table 2: Articles from bibtex					
Key	Authors	Title	LC	Cite	Year	Journal	Pages
PandeyS21a PandeyS21a	V. Pandey, P. Saini	Constraint programming versus heuristic approach to MapReduce scheduling problem in Hadoop YARN for energy minimization		[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		[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		[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		[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		[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		[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		[249]	2020	Comput. Oper. Res.	1
MengZRZL20 MengZRZL20	L. Meng, C. Zhang, Y. Ren, B. Zhang, C. Lv	Mixed-integer linear programming and constraint pro- gramming formulations for solving distributed flexible job shop scheduling problem		[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
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		[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		[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		[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		[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		[284]	2019	Comput. Ind. Eng.	13
WikarekS19 WikarekS19	J. Wikarek, P. Sitek	A Constraint-Based Declarative Programming Framework for Scheduling and Resource Allocation Problems		[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		[41]	2019	CoRR	null
abs-1902-01193 abs- 1902-01193	O. M. Alade, A. O. Amusat	Solving Nurse Scheduling Problem Using Constraint Programming Technique		[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		[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		[134]	2019	CoRR	null

		Table 2: Articles from bibtex					
Key	Authors	Title	LC	Cite	Year	Journal	Pages
BaptisteB18 BaptisteB18	P. Baptiste, N. Bonifas	Redundant cumulative constraints to compute preemptive bounds		[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		[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		[132]	2018	Comput. Ind. Eng.	11
GokgurHO18 GokgurHO18	B. Gökgür, B. Hnich, S. Özpeynirci	Parallel machine scheduling with tool loading: a constraint 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		[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		[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		[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		[412]	2018	IEEE Trans. Engineering Management	18
KreterSS17 KreterSS17	S. Kreter, A. Schutt, Peter J. Stuckey	Using constraint programming for solving RCPSP/max-cal		[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		[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
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		[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		[407]	2016	J. Intell. Manuf.	17
EvenSH15a EvenSH15a	C. Even, A. Schutt, Pascal Van Hentenryck	A Constraint Programming Approach for Non-Preemptive Evacuation Scheduling		[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		[144]	2015	Eur. J. Oper. Res.	12
Kameugne15 Kameugne15	R. Kameugne	Propagation techniques of resource constraint for cumulative scheduling		[191]	2015	Constraints An Int. J.	2
LetortCB15 LetortCB15	A. Letort, M. Carlsson, N. Beldiceanu	Synchronized sweep algorithms for scalable scheduling constraints		[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		[276]	2015	Constraints An Int. J.	21
Siala15 Siala15	M. Siala	Search, propagation, and learning in sequencing and scheduling problems		[339]	2015	Constraints An Int. J.	2
SimoninAHL15 SimoninAHL15	G. Simonin, C. Artigues, E. Hebrard, P. Lopez	Scheduling scientific experiments for comet exploration		[342]	2015	Constraints An Int. J.	23
WangMD15 WangMD15	T. Wang, N. Meskens, D. Duvivier	Scheduling operating theatres: Mixed integer programming vs. constraint programming		[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		[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 cumulative resource constraints		[195]	2014	Constraints An Int. J.	27

		Table 2: Articles from bibtex					
Key	Authors	Title	LC	Cite	Year	Journal	Pages
NovasH14 NovasH14	Juan M. Novas, Gabriela P. Henning	Integrated scheduling of resource-constrained flexible manufacturing systems using constraint programming		[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		[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		[293]	2013	Constraints An Int. J.	36
HeinzSSW12 HeinzSSW12	S. Heinz, T. Schlechte, R. Stephan, M. Winkler	Solving steel mill slab design problems		[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		[237]	2012	Constraints An Int. J.	32
LombardiM12 Lom- bardiM12	M. Lombardi, M. Milano	Optimal methods for resource allocation and scheduling: a cross-disciplinary survey		[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		[286]	2012	Comput. Chem. Eng.	17
BartakS11 BartakS11	R. Barták, Miguel A. Salido	Constraint satisfaction for planning and scheduling problems		[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		[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		[158]	2011	Ann. Oper. Res.	16
KelbelH11 KelbelH11	J. Kelbel, Z. Hanzálek	Solving production scheduling with earliness/tardiness penalties by constraint programming		[198]	2011	J. Intell. Manuf.	10
KovacsB11 KovacsB11	A. Kovács, J. Christopher Beck	A global constraint for total weighted completion time for unary resources		[210]	2011	Constraints An Int. J.	24
KovacsK11 KovacsK11	A. Kovács, T. Kis	Constraint programming approach to a bilevel scheduling problem		[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		[326]	2011	Constraints An Int. J.	23
SchuttFSW11 SchuttFSW11	A. Schutt, T. Feydy, Peter J. Stuckey, Mark G. Wallace	Explaining the cumulative propagator		[332]	2011	Constraints An Int. J.	33
TopalogluO11 TopalogluO11	S. Topaloglu, I. Ozkarahan	A constraint programming-based solution approach for medical resident scheduling problems		[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		[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		[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		[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		[409]	2010	Eng. Appl. Artif. Intell.	20
BocewiczBB09 BocewiczBB09	G. Bocewicz, I. Bach, Zbigniew Antoni Banaszak	Logic-algebraic method based and constraints programming 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		[126]	2009	J. Sched.	30
abs-0907-0939 abs-0907- 0939	T. Petit, E. Poder	The Soft Cumulative Constraint		[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		[127]	2008	Eng. Appl. Artif. Intell.	11

		Table 2: Articles from bibtex					
Key	Authors	Title	LC	Cite	Year	Journal	Pages
KovacsB08 KovacsB08	A. Kovács, J. Christopher Beck	A global constraint for total weighted completion time for cumulative resources		[209]	2008	Eng. Appl. Artif. Intell.	7
LiessM08 LiessM08	O. Liess, P. Michelon	A constraint programming approach for the resource- constrained project scheduling problem		[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	H. Simonis	Models for Global Constraint Applications		[344]	2007	Constraints An Int. J.	30
Hooker06 Hooker06	John N. Hooker	An Integrated Method for Planning and Scheduling to Minimize Tardiness		[180]	2006	Constraints An Int. J.	19
KhayatLR06 Khay- atLR06	Ghada El Khayat, A. Langevin, D. Riopel	Integrated production and material handling scheduling using mathematical programming and constraint programming		[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		[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		[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		[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		[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		[218]	2003	J. Syst. Archit.	15
Tsang03 Tsang03	Edward P. K. Tsang	Constraint Based Scheduling: Applying Constraint Programming to Scheduling Problems		[368]	2003	J. Sched.	2
LorigeonBB02 Lori- geonBB02	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		[362]	2002	OR Spectr.	18
MartinPY01 Mart- inPY01	F. Martin, A. Pinkney, X. Yu	Cane Railway Scheduling via Constraint Logic Programming: Labelling Order and Constraints in a Real-Life Application		[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		[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		[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		[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		[171]	2000	Constraints An Int. J.	8
KorbaaYG00 KorbaaYG00	O. Korbaa, P. Yim, J. Gentina	Solving Transient Scheduling Problems with Constraint Programming		[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		[247]	2000	Eur. J. Control	4
SakkoutW00 SakkoutW00	Hani El Sakkout, M. Wallace	Probe Backtrack Search for Minimal Perturbation in Dynamic Scheduling		[325]	2000	Constraints An Int. J.	30
SchildW00 SchildW00	K. Schild, J. Würtz	Scheduling of Time-Triggered Real-Time Systems		[327]	2000	Constraints An Int. J.	23

		Table 2: Articles from bibtex					
Key	Authors	Title	LC	Cite	Year	Journal	Pages
BensanaLV99 BensanaLV99	E. Bensana, M. Lemaître, G. Verfaillie	Earth Observation Satellite Management		[51]	1999	Constraints An Int. J.	7
BelhadjiI98 BelhadjiI98	S. Belhadji, A. Isli	Temporal Constraint Satisfaction Techniques in Job Shop Scheduling Problem Solving		[46]	1998	Constraints An Int. J.	9
PapaB98 PapaB98	Claude Le Pape, P. Baptiste	Resource Constraints for Preemptive Job-shop Scheduling		[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		[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		[114]	1997	Inf. Comput.	27
Zhou97 Zhou97	J. Zhou	A Permutation-Based Approach for Solving the Job-Shop Problem		[415]	1997	Constraints An Int. J.	29
Wallace96 Wallace96	M. Wallace	Practical Applications of Constraint Programming		[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		[101]	1990	J. Log. Program.	19

### 4 Authors

Table 3: Co-Authors of Articles/Papers

Author	Entries
Carla Juvin	JuvinHHL23[188] JuvinHL23[189]
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]
Laurent Houssin	JuvinHHL23[188] JuvinHL23[189]
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]
Guillaume Povéda	PovedaAA23[309]
Nahum Álvarez	PovedaAA23[309]
Christian Artigues	PovedaAA23[309] PohlAK22[305] Polo-MejiaALB20[306] NattafAL17[277] SimoninAHL15[342] NattafAL15[276] SialaAH15[340] SimoninAHL12[341] ArtiguesBF04[16] ArtiguesR00[17]
Younes Aalian	AalianPG23[1]
Gilles Pesant	AalianPG23[1] DoulabiRP16[104] PesantRR15[301] DoulabiRP14[103]
Michel Gamache	AalianPG23[1] CampeauG22[72]
Roger Kameugne	KameugneFND23[193] KameugneFGOQ18[192] Kameugne15[191] KameugneFSN14[195] KameugneFSN11[194]
Sévérine Betmbe Fetgo	KameugneFND23[193] FetgoD22[116] KameugneFGOQ18[192]
Thierry Noulamo	KameugneFND23[193]
Clémentin Tayou Djamégni	KameugneFND23[193] FetgoD22[116]
Eddie Armstrong	ArmstrongGOS22[14] ArmstrongGOS21[13]
Michele Garraffa	ArmstrongGOS22[14] ArmstrongGOS21[13]
Barry O'Sullivan	ArmstrongGOS22[14] ArmstrongGOS21[13] GrimesIOS14[152] IfrimOS12[185]
Helmut Simonis	ArmstrongGOS22[14] ArmstrongGOS21[13] GrimesIOS14[152] IfrimOS12[185] Simonis07[344] SimonisC95[345] Simonis95[343] DincbasSH90[101]
Nikolaos Efthymiou	EfthymiouY23[106]
Neil Yorke-Smith	EfthymiouY23[106] WallaceY20[389]
Samuel Squillaci	SquillaciPR23[346]
Cédric Pralet	SquillaciPR23[346] Pralet17[310] PraletLJ15[311]
Stéphanie Roussel	SquillaciPR23[346]
Dongyun Kim	KimCMLLP23[202]

Table 3: Co-Authors of Articles/Papers

Author	Entries
Yeonjun Choi	KimCMLLP23[202]
Kyungduk Moon	KimCMLLP23[202]
Myungho Lee	KimCMLLP23[202]
Kangbok Lee	$\operatorname{KimCMLLP23[202]}$
Michael L. Pinedo	KimCMLLP23[202]
Fabio Tardivo	TardivoDFMP23[354]
Agostino Dovier	TardivoDFMP23[354]
Andrea Formisano	TardivoDFMP23[354]
Laurent Michel	TardivoDFMP23[354] SchausHMCMD11[326] HentenryckM08[173] HentenryckM04[172]
Enrico Pontelli	TardivoDFMP23[354] VillaverdeP04[386]
Raphaël Boudreault	BoudreaultSLQ22[67]
Vanessa Simard	BoudreaultSLQ22[67]
Daniel Lafond	BoudreaultSLQ22[67]
Claude-Guy Quimper	BoudreaultSLQ22[67] OuelletQ22[291] Mercier-AubinGQ20[263] FahimiOQ18[113] KameugneFGOQ18[192] Ouel-
• •	letQ18[290] GingrasQ16[141] BessiereHMQW14[53] OuelletQ13[289]
Louis Popovic	PopovicCGNC22[307]
Alain Côté	PopovicCGNC22[307]
Mohamed Gaha	PopovicCGNC22[307]
Franklin Nguewouo	PopovicCGNC22[307]
Quentin Cappart	PopovicCGNC22[307] CappartS17[73]
Felix Winter	LacknerMMWW23[224] WinterMMW22[396] LacknerMMWW21[223] GeibingerKKMMW21[133]
Sebastian Meiswinkel	WinterMMW22[396]
Nysret Musliu	LacknerMMWW23[224] WinterMMW22[396] LacknerMMWW21[223] GeibingerKKMMW21[133] GeibingerMM21[136]
	GeibingerMM19[135] abs-1911-04766[134] KletzanderM17[204]
Daniel Walkiewicz	LacknerMMWW23[224] WinterMMW22[396] LacknerMMWW21[223]
Marc Geitz	GeitzGSSW22[137]
Cristian Grozea	GeitzGSSW22[137]
Wolfgang Steigerwald	GeitzGSSW22[137]
Robin Stöhr	GeitzGSSW22[137]
Armin Wolf	GeitzGSSW22[137] SchuttW10[334] WolfS05[398] Wolf03[397]
Yanick Ouellet	OuelletQ22[291] FahimiOQ18[13] KameugneFGOQ18[192] OuelletQ18[290]
Valentin Antuori	AntuoriHHEN21[11]
Marie-José Huguet	AntuoriHHEN21[11]
Siham Essodaigui	AntuoriHHEN21[11]
Alain Nguyen	AntuoriHHEN2[11] AntuoriHHEN2[11]
Benjamin Kovács	KovacsTKSG21[215]
Pierre Tassel	TasselGS23[355] abs-2306-05747[356] KovacsTKSG21[215]
Wolfgang Kohlenbrein	TasserG525[555] abs-2500-05747[550] Kovacs FK5G21[215] KovacsTKSG21[215]
Philipp Schrott-Kostwein	KovacsTKSG21[215] KovacsTKSG21[215]
Martin Gebser	TasselGS23[355] abs-2306-05747[356] KovacsTKSG21[215]
Marie-Louise Lackner	LacknerMMWW23[224] LacknerMMWW21[223]
	LacknerMMWW23[224] LacknerMMWW21[223]  LacknerMMWW23[224] LacknerMMWW21[223]
Christoph Mrkvicka	
Alessandro Hill Jordan Ticktin	HillTV2[175]
	HillTV21[175]
Thomas W. M. Vossen	HillTV21[175]
Christian Klanke	KlankeBYE21[203]
Dominik R. Bleidorn	KlankeBYE21[203]
Vassilios Yfantis	KlankeBYE21 [203]
Sebastian Engell	KlankeBYE21[203]
Claire Hanen	HanenKP21[159]
Alix Munier Kordon	HanenKP21[159]
Theo Pedersen	HanenKP21[159]
Max Åstrand	Astrand0F21[20] Astrand21[19] AstrandJZ20[22] AstrandJZ18[21]
Mikael Johansson	Astrand0F21[20] AstrandJZ20[22] AstrandJZ18[21]
Hamid Reza Feyzmahdavian	Astrand0F21[20]
Tobias Geibinger	GeibingerKKMMW21[133] GeibingerMM21[136] GeibingerMM19[135] abs-1911-04766[134]

Table 3: Co-Authors of Articles/Papers

Author	Entries
Lucas Kletzander	GeibingerKKMMW21[133] KletzanderM17[204]
Matthias Krainz	GeibingerKKMMW21[133]
Florian Mischek	GeibingerKKMMW21[133] GeibingerMM21[136] GeibingerMM19[135] abs-1911-04766[134]
Margaux Nattaf	NattafM20[278] MalapertN19[254] NattafAL17[277] NattafAL15[276]
Arnaud Malapert	NattafM20[278] MalapertN19[254] GrimesHM09[151]
Lucas Groleaz	GroleazNS20[154] GroleazNS20a[153]
Samba Ndojh Ndiaye	GroleazNS20[154] GroleazNS20a[153]
Christine Solnon	GroleazNS20[154] GroleazNS20a[153] SacramentoSP20[322] MelgarejoLS15[6]
Alexandre Mercier-Aubin	$\operatorname{Mercier-AubinGQ20[263]}$
Jonathan Gaudreault	$egin{array}{ll} \operatorname{Mercier-AubinGQ20[263]} \end{array}$
Tanya Y. Tang	$\mathrm{TangB20[352]}$
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]
Johan Wessén	WessenCS20[394]
Mats Carlsson	WessenCS20[394] MossigeGSMC17[269] LetortCB15[230] LetortCB13[229] LetortBC12[228] BeldiceanuCDP11[43] BeldiceanuCP08[44] BeldiceanuC02[42]
Christian Schulte	WessenCS20[394] FrimodigS19[121]
Giacomo Da Col	ColT19[83]
Erich Christian Teppan	Teppan22[358] ColT19[83]
Sara Frimodig	FrimodigS19[121]
Cristian Galleguillos	GalleguillosKSB19[124]
Zeynep Kiziltan	GalleguillosKSB19[124]
Alina Sîrbu	GalleguillosKSB19[124]
Özalp Babaoglu	GalleguillosKSB19[124]
Stanislav Murín	MurinR19[273]
Hana Rudová	MurinR19[273]
Jordi Coll Caballero	Caballero23[71]
Louis-Pierre Campeau	CampeauG22[72]
Jana Koehler	KoehlerBFFHPSSS21[205]
Josef Bürgler	KoehlerBFFHPSSS21[205]
Urs Fontana	KoehlerBFFHPSS21[205]
Etienne Fux	KoehlerBFFHPSSS21[205]
Florian A. Herzog	KoehlerBFFHPSSS21[205]
Marc Pouly	KoehlerBFFHPSSS21[205]
Sophia Saller	KoehlerBFFHPSS21[205]
Anastasia Salyaeva	KoehlerBFFHPSS21[205]
Peter Scheiblechner	KoehlerBFFHPSS21[205]
Kai Waelti	KoehlerBFFHPSS21[205]
Ondrej Benedikt István Módos	BenediktMH20[48] BenediktSMVH18[49]
Zdenek Hanzálek	BenediktMH20[48] BenediktSMVH18[49] Mehdizadeh-Somarin23[260] abs-2305-19888[170] HeinzNVH22[169] VlkHT21[387] BenediktMH20[48] BenediktSMVH18[49]
	KelbelH11[198]
Mark Wallace	Wallace Y20[389] He0GLW18[161] SchuttFSW09[331] SakkoutW00[325] RodosekW98[320] Wallace96[388]
Philippe Laborie	LunardiBLRV20[249] LaborieRSV18[222] Laborie18a[221] MelgarejoLS15[6] VilimLS15[385] Laborie09[220] BaptisteLPN06[27]
Jerome Rogerie	LaborieRSV18[222]
Paul Shaw	LaborieRSV18[222] VilimLS15[385]
Petr Vilím	$ LaborieRSV18[222] \ \ VilimLS15[385] \ \ Vilim11[382] \ \ \ Vilim09[380] \ \ \ cpaior-Vilim09[381] \ \ \ VilimBC05[384] \ \ \ Vilim05[379] \ \ \ VilimBC04[383] \ \ \ Vilim04[378] \ \ \ Vilim03[377] \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
Hamed Fahimi	FahimiOQ18[113]
Stefan Kreter	KreterSS17[217] KreterSS15[216]
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]
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]

Table 3: Co-Authors of Articles/Papers

Author	Entries
Gilles Simonin	GodetLHS20[143] SimoninAHL15[342] SimoninAHL12[341]
Arnaud Letort	LetortCB15[230] LetortCB13[229] LetortBC12[228]
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]
Mohamed Siala	Šiala15[339] SialaAH15[340]
Laure Pauline Fotso	KameugneFSN14[195] KameugneFSN11[194]
Joseph D. Scott	KameugneFSN14[195] KameugneFSN11[194]
Youcheu Ngo-Kateu	KameugneFSN14[195] KameugneFSN11[194]
Stefan Heinz	HeinzSB13[168] HeinzKB13[165] HeinzSSW12[166] HeinzB12[164] HeinzS11[167] BertholdHLMS10[52]
Jens Schulz	HeinzSB13[168] HeinzS11[167] BertholdHLMS10[52]
Cemalettin Öztürk	OzturkTHO13[293]
Semra Tunali	OzturkTHO13[293]
Brahim Hnich	GokgurHO18[145] OzturkTHO13[293] RossiTHP07[321]
M. Arslan Ornek	OzturkTHO13[293]
Thomas Schlechte	m HeinzSSW12[166]
Rüdiger Stephan	HeinzSSW12[166]
Michael Winkler	m HeinzSSW12[166]
Michele Lombardi	BonfiettiZLM16[64] LombardiBM15[241] BartoliniBBLM14[35] BonfiettiLM14[63] LombardiM12[245] BonfiettiLBM12[62] BonfiettiLBM11[61] LombardiBMB11[242] LombardiM10[244] LombardiM09[243] HoeveGSL07[373]
Michela Milano	BonfiettiZLM16[64] LombardiBM15[241] BartoliniBBLM14[35] BonfiettiLM14[63] LombardiM12[245] BonfiettiLBM12[62] BonfiettiLBM11[61] LombardiBMB11[242] LombardiM10[244] LombardiM09[243] BeniniBGM06[50]
Kamol Limtanyakul	LimtanyakulS12[237] Limtanyakul07[236]
Uwe Schwiegelshohn	LimtanyakulS12[237]
András Kovács	KovacsB11[210] KovacsK11[212] KovacsB08[209] KovacsV06[214] KovacsEKV05[211] KovacsV04[213]
Pierre Schaus	CappartS17[73] CauwelaertDMS16[76] DejemeppeCS15[92] GayHLS15[128] GayHS15[129] cpaior-GayHS15[130] Hound-jiSWD14[183] GaySS14[131] SchausHMCMD11[326]
Pascal Van Hentenryck	FontaineMH16[117] EvenSH15[111] EvenSH15a[112] SchausHMCMD11[326] MonetteDH09[266] DoomsH08[102] HentenryckM08[173] HentenryckM04[172] DincbasSH90[101]
Jean-Noël Monette	CauwelaertDMS16[76] SchausHMCMD11[326] MonetteDH09[266] MonetteDD07[265]
Carleton Coffrin	SchausHMCMD11[326]
Yves Deville	HoundjiSWD14[183] DejemeppeD14[93] SchausHMCMD11[326] MonetteDH09[266] MonetteDD07[265]
Roman Barták	BartakS11[34] VilimBC05[384] VilimBC04[383] Bartak02[33] Bartak02a[32]
Miguel A. Salido	BartakS11[34] AbrilSB05[3]
Thibaut Feydy	YoungFS17[403] SchuttFS13[330] cpaior-SchuttFS13[329] SchuttFSW11[332] SchuttFSW09[331]
Mark G. Wallace	SchuttCSW12[328] SchuttFSW11[332]
Tamás Kis	KovacsK11[212] KeriK07[199] KovacsEKV05[211]
Tony Minoru Tamura Lopes	LopesCSM10[246] MouraSCL08[271] MouraSCL08a[270]
André A. Ciré	CireCH13[80] LopesCSM10[246] MouraSCL08[271] MouraSCL08a[270]
Cid Carvalho de Souza	LopesCSM10[246]
Arnaldo Vieira Moura John N. Hooker	LopesCSM10[246] MouraSCL08[271] MouraSCL08a[270]  Hadron 7[181] Hadron M16[162] Circ CH 3[20] Color H 10[22] Hadron 06[180] Hadron 05[172] and Hadron 05[170] Hadron 04[177]
John N. Hooker	Hooker17[181] HechingH16[163] CireCH13[80] CobanH10[82] Hooker06[180] Hooker05[178] cp-Hooker05[179] Hooker04[177] HookerY02[182]
Ondroi Conole	VilimBC05[384] VilimBC04[383]
Ondrej Cepek Philippe Baptiste	BaptisteB18[26] Baptiste09[25] BaptisteLPN06[27] ArtiouchineB05[18] BaptisteP00[29] PapaB98[296] BaptisteP97[28] Pa-
Claude Le Pape	peB97[295] BaptisteD0[27] BaptisteP00[29] PapaB98[296] BaptisteP97[28] PapeB97[295]
Klaus Schild	SchildW00[327]
Jörg Würtz	SchildW00[327]
Hani El Sakkout	KamarainenS02[190] SakkoutW00[325]
Susanne Heipcke	HeipokeCCS00[171]
Yves Colombani	HeipckeCCS00[171] Colombani96[84]
Cristina C. B. Cavalcante	HeipokeCCS00[171] Colombani30[04]
Cid C. de Souza	MouraSCL08[271] MouraSCL08a[270] HeipckeCCS00[171]
E. Bensana	BensanaLV99[51]
Michel Lemaître	VerfaillieL01[375] BensanaLV99[51]

Table 3: Co-Authors of Articles/Papers

Author	Entries
Gérard Verfaillie	VerfaillieL01[375] BensanaLV99[51]
Said Belhadji	BelhadjiI98[46]
Amar Isli	BelhadjiI98[46]
Jianyang Zhou	Zhou97[415] $Zhou96[414]$
Ken Darby-Dowman	Darby-DowmanLMZ97[86]
James Little	KrogtLPHJ07[372] Darby-DowmanLMZ97[86]
Gautam Mitra	Darby-DowmanLMZ97[86]
Marco Zaffalon	Darby-DowmanLMZ97[86]
Diarmuid Grimes	GrimesIOS14[152] GrimesH11[150] GrimesH10[149] GrimesHM09[151]
Georgiana Ifrim	GrimesIOS14[152] IfrimOS12[185]
Alexander Tesch	Tesch18[360] Tesch16[359]
Shan He	m He0GLW18[161]
Graeme Gange	m He0GLW18[161]
Ariel Liebman	m He0GLW18[161]
Campbell Wilson	He0GLW18[161]
Miquel Bofill	BofillCSV17[57] BofillGSV15[59] BofillEGPSV14[58]
Jordi Coll	BofillCSV17[57]
Josep Suy	BofillCSV17[57] BofillGSV15[59] BofillEGPSV14[58]
Mateu Villaret	BofillCSV17[57] BofillGSV15[59] BofillEGPSV14[58]
Kenneth D. Young	YoungFS17[403]
Adrian Goldwaser	GoldwaserS17[146]
Tong Liu	LiuCGM17[239]
Roberto Di Cosmo	LiuCGM17 <sup>†</sup> 239 <sup>†</sup>
Maurizio Gabbrielli	LiuCGM17 <sup>[</sup> 239 <sup>†</sup> FalaschiGMP97 <sup>[</sup> 114]
Jacopo Mauro	LiuCGM17[239]
Morten Mossige	MossigeGSMC17[269]
Arnaud Gotlieb	MossigeGSMC17[269] AlesioNBG14[99]
Helge Spieker	MossigeGSMC17[269]
Hein Meling	MossigeGSMC17[269]
Alessio Bonfietti	BonfiettiZLM16[64] Bonfietti16[60] LombardiBM15[241] BonfiettiLM14[63] BonfiettiLBM12[62] BonfiettiLBM11[61] LombardiBMB11[242]
Alessandro Zanarini	AstrandJZ20 22 AstrandJZ18[21] BonfiettiZLM16[64]
Ria Szeredi	SzerediS16[351]
Sascha Van Cauwelaert	CauwelaertDMS16[76] DejemeppeCS15[92]
Cyrille Dejemeppe	CauwelaertDMS16[76] Dejemeppe16[91] DejemeppeCS15[92] DejemeppeD14[93]
Kyle E. C. Booth	BoothNB16[65]
Goldie Nejat	BoothNB16[65]
Katherine Giles	GilesH16[140]
Willem-Jan van Hoeve	GilesH16[140] GoelSHFS15[144]
BoonPing Lim	LimHTB16[234] LimBTBB15[235]
Hassan L. Hijazi	LimHTB16[234]
Sylvie Thiébaux	LimHTB16 234  LimBTBB15 235
Menkes van den Briel	LimHTB16[234] LimBTBB15[235]
Steven Gay	GayHLS15[128] GayHS15[129] cpaior-GayHS15[130] GaySS14[131]
Renaud Hartert	GayHLS15[128] GayHS15[129] cpaior-GayHS15[130]
Christophe Lecoutre	GayHLS15[128]
Caroline Even	EvenSH15[111] EvenSH15a[112]
Seán Óg Murphy	MurphyMB15[274]
Oscar Manzano	MurphyMB15[274]
Kenneth N. Brown	MurphyMB15[274] WuBB05[401]
Solange Lemai-Chenevier	PraletLJ15[311]
Jean Jaubert	PraletLJ15[31]
Alban Derrien	Derrien15[961] DerrienP14[97] DerrienPZ14[98]
Thierry Petit	DerrienP14[97] DerrienPZ14[98] ClercqPBJ11[81] abs-0907-0939[302]
Stéphane Zampelli	DerrienPZ14[98] DerrienPZ14[98]
Vinasétan Ratheil Houndji	HoundiiSWD14[183]
vinascian raunch mountaji	nounding application

Table 3: Co-Authors of Articles/Papers

Author	Entries
Laurence A. Wolsey	HoundjiSWD14[183] SadykovW06[324]
Andrea Bartolini	BartoliniBBLM14[35]
Andrea Borghesi	BartoliniBBLM14[35]
Thomas Bridi	BartoliniBBLM14[35]
Joan Espasa	BofillEGPSV14[58]
Marc Garcia	BofillGSV15[59] BofillEGPSV14[58]
Miquel Palahí	BofillEGPSV14[58]
Stefano Di Alesio	AlesioNBG14[99]
Shiva Nejati	AlesioNBG14[99]
Lionel C. Briand	AlesioNBG14[99]
Vivian De Smedt	GaySS14[131]
Pierre Ouellet	OuelletQ13[289]
Thiago Serra	SerraNM12[335]
Gilberto Nishioka	SerraNM12[335]
Fernando J. M. Marcellino	SerraNM12[335]
Fabien Hermenier	HermenierDL11[174]
Sophie Demassey	HermenierDL11 174 BeldiceanuCDP11[43] Demassey03[94]
Xavier Lorca	GodetLHS20[143] HermenierDL11[174]
Luca Benini	BonfiettiLBM11[62] BonfiettiLBM11[61] LombardiBMB11[242] BeniniBGM06[50]
Alexis De Clercq	ClercqPBJ11[81]
Narendra Jussien	ClercqPBJ11[81] ElkhyariGJ02[107] ElkhyariGJ02a[108]
Andrew J. Davenport	Davenport10[87] DavenportKRSH07[88] BeckDF97[37]
Jayant Kalagnanam	DavenportKRSH07[88]
Chandra Reddy	DavenportKRSH07[88]
Stuart Siegel	DavenportKRSH07[88]
John Hou	DavenportKRSH07[88]
Antoine Gargani	GarganiR07[125]
Philippe Refalo	GarganiR07[125]
Roman van der Krogt	KrogtLPHJ07[372]
Kenneth Pulliam	KrogtLPHJ07 <sup>1</sup> 372 <sup>1</sup>
Sue Hanhilammi	KrogtLPHJ07i372
Yue Jin	KrogtLPHJ07[372]
Mohand Ou Idir Khemmoudj	KhemmoudjPB06[201]
Marc Porcheron	KhemmoudiPB06[201]
Hachemi Bennaceur	KhemmoudiPB06[201]
Konstantin Artiouchine	ArtiouchineB05[18]
Jérôme Fortin	FortinZDF05[118]
Pawel Zielinski	FortinZDF05[118]
Didier Dubois	FortinZDF05 118
Hélène Fargier	FortinZDF05[118]
Bistra Dilkina	DilkinaDH05[100]
Lei Duan	DilkinaDH05[100]
William S. Havens	DilkinaDH05[100]
Montserrat Abril	AbrilSB05[3]
Federico Barber	AbrilSB05[3]
Tom Carchrae	CarchraeBF05[74]
Eugene C. Freuder	CarchraeBF05[74]
Christine Wei Wu	WuBB05[401]
Paul Tyler	HebrardTW05[162]
Toby Walsh	GelainPRVW17[138] BessiereHMQW14[53] HebrardTW05[162]
Péter Egri	KovacsEKV05[211]
József Váncza	KovacsV06[214] KovacsEKV05[211] KovacsV04[213] VanczaM01[374]
Andrew Lim	LimRX04[233] RovacsLtv00[211] Rovacsv04[215] Valiczalilo1[574]
Brian Rodrigues	LimRX04[233]
Zhou Xu	LimRX04[233]
Angelo Oddi	DddiPCC03[288]
	0.000[-00]

Table 3: Co-Authors of Articles/Papers

Author	Entries
Nicola Policella	OddiPCC03[288]
Amedeo Cesta	OddiPCC03[288] CestaOS98[77]
Gabriella Cortellessa	OddiPCC03[288]
T. K. Satish Kumar	Kumar03[219]
Emilie Danna	DannaP03[85]
Laurent Perron	DannaP03[85]
Nicola Muscettola	Muscettola02[275]
Olli Kamarainen	KamarainenS02[190]
Hong Yan	HookerY02[182]
Abdallah Elkhyari	ElkhyariGJ02[107] ElkhyariGJ02a[108]
Christelle Guéret	ElkhyariGJ02[107] ElkhyariGJ02a[108]
András Márkus	VanczaM01[374]
Ola Angelsmark	AngelsmarkJ00[10]
Peter Jonsson	AngelsmarkJ00[10]
Robert Rodosek	RodosekW98[320]
Stephen F. Smith	CestaOS98[77]
Daniel Frost	FrostD98[123]
Rina Dechter	Frost D98[123]
Yves Caseau	Caseau97[75]
Mark S. Fox	BeckDF97[37]
Trijntje Cornelissens	SimonisC95[345]
Hans-Joachim Goltz	Goltz95[147]
Jean-Francois Puget	Puget95[313]
Touraïvane	Touraivane95[366]
Pim van den Bogaerdt	BogaerdtW19[371]
Mathijs de Weerdt	BogaerdtW19[371]
Moli Yang	YangSS19[402]
Premysl Sucha	BenediktSMVH18[49]
Marek Vlk	abs-2305-19888[170] HeinzNVH22[169] VlkHT21[387] BenediktSMVH18[49]
Emir Demirovic	DemirovicS18[95]
Vincent Gingras	KameugneFGOQ18[192] GingrasQ16[141]
Mirco Gelain	GelainPRVW17[138]
Maria Silvia Pini	GelainPRVW17[138]
Francesca Rossi	GelainPRVW17[138]
Kristen Brent Venable	GelainPRVW17[138]
Daniel Fontaine	FontaineMH16[117]
Laurent D. Michel	FontaineMH16[117]
Aliza R. Heching	HechingH16[163]
Gilles Madi-Wamba	Madi-WambaLOBM17[252] Madi-WambaB16[251]
Penélope Aguiar-Melgarejo	MelgarejoLS15[6]
Christina N. Burt	RutLPS15[70]
Nir Lipovetzky	BurtLPS15[70]
Adrian R. Pearce	BurtLPS15[70]
Russell Bent	LimBTBB15[235]
Scott Backhaus	LimBTBB15[235]
Gregory Rix	PesantRR15[301]
Louis-Martin Rousseau	PoulabiRP16[104]   PesantRR15[301]   DoulabiRP14[103]   ChapadosJR11[78]   HachemiGR11[158]
Sebastian Kosch	KoschB14[208]
Christian Bessiere	BessiereHMQW14[53]
Marc-André Ménard	BessiereHMQW14[53]
Seyed Hossein Hashemi Doulabi	DoulabiRP16[104] DoulabiRP14[103]
Wen-Yang Ku	HeinzKB13[165]
Elena Kelareva	KelarevaTK13[197]
Kevin Tierney	KelarevaTK13[197] KelarevaTK13[197]
Philip Kilby	KelarevaTK13[197] KelarevaTK13[197]
Elvin Coban	CireCH13[80] CobanH10[82]
Livin Joban	Chechiolog Cobamilo(2)

Table 3: Co-Authors of Articles/Papers

Author	Entries
Hanyu Gu	GuSS13[156]
Jean-Charles Billaut	BillautHL12[54] LorigeonBB02[248]
Andrea Rendl	RendlPHPR12[318]
Matthias Prandtstetter	RendlPHPR12[318]
Gerhard Hiermann	RendlPHPR12[318]
Jakob Puchinger	RendlPHPR12[318]
Günther R. Raidl	FrohnerTR19[122] RendlPHPR12[318]
Geoffrey Chu	SchuttCSW12[328]
Nicolas Chapados	ChapadosJR11[78]
Marc Joliveau	ChapadosJR11[78]
Emrah B. Edis	EdisO11[105]
Ceyda Oguz	EdisO11[105]
Asma Lahimer	LahimerLH11[225]
Mohamed Haouari	LahimerLH11[225]
Timo Berthold	BertholdHLMS10[52]
Marco E. Lübbecke	BertholdHLMS10[52]
Rolf H. Möhring	BertholdHLMS10[52]
Rodrigo Acuna-Agost	Acuna-AgostMFG09[4]
Philippe Michelon	Acuna-AgostMFG09[4] LiessM08[232]
Dominique Feillet	Acuna-AgostMFG09[4] ArtiguesBF04[16]
Serigne Gueye	Acuna-AgostMFG09[4]
Emmanuel Poder	BeldiceanuCDP11[43] abs-0907-0939[302] BeldiceanuCP08[44] PoderB08[303] BeldiceanuP07[45] PoderBS04[304]
Grégoire Dooms	DoomsH08[102]
Jean-Paul Watson	BeckFW11 <sup>†</sup> 381 WatsonB08 <sup>[393]</sup>
Ada Barlatt	BarlattCG08[31]
Amy Mainville Cohn	BarlattCG08[31]
Oleg Yu. Gusikhin	BarlattCG08[31]
Hoong Chuin Lau	LauLN08[226]
Kong Wei Lye	LauLN08[226]
Viet Bang Nguyen	LauLN08 <sup>[226]</sup>
András Kéri	KeriK07[199]
Pierre Dupont	MonetteDD07[265]
Roberto Rossi	RossiTHP07[321]
Armagan Tarim	RossiTHP07[321]
Steven D. Prestwich	RossiTHP07[321]
J. M. van den Akker	AkkerDH07[370]
Guido Diepen	AkkerDH07[370]
J. A. Hoogeveen	AkkerDH07[370]
Davide Bertozzi	$\operatorname{BeniniBGM06[50]}$
Alessio Guerri	Benini $\operatorname{BGM06[50]}$
Yingyi Chu	ChuX05[79]
Quanshi Xia	ChuX05[79]
Jeremy Frank	FrankK05[119]
Elif Kürklü	FrankK05[119]
Christos T. Maravelias	MaraveliasG04[257]
Ignacio E. Grossmann	m Maravelias G04[257]
Sana Belmokhtar	ArtiguesBF04[16]
Ruslan Sadykov	SadykovW06[324] Sadykov04[323]
Bruno A. Prata	PrataAN23[312] AbreuNP23[90]
Levi R. Abreu	PrataAN23[312]
Marcelo S. Nagano	PrataAN23[312]
Vahid Riahi	RiahiNS018[319]
M. A. Hakim Newton	RiahiNS018[319]
Kaile Su	RiahiNS018[319]
Abdul Sattar	RiahiNS018[319]
Arthur Bit-Monnot	Bit-Monnot23[55]
	1541

Table 3: Co-Authors of Articles/Papers

Author	Entries
Ruixin Wang	WangB23[391] WangB20[390]
Nicolas Barnier	WangB23[391] WangB20[390]
Su Nguyen	abs-2402-00459[279] abs-2211-14492[348]
Dhananjay R. Thiruvady	abs-2402-00459[279] abs-2211-14492[348] ThiruvadyBME09[361]
Yuan Sun	abs-2402-00459[279] abs-2211-14492[348]
Mengjie Zhang	abs-2402-00459[279]
Bilal Omar Akram	AkramNHRSA23[7]
Nor Kamariah Noordin	AkramNHRSA23[7]
Fazirulhisyam Hashim	AkramNHRSA23[7]
Mohd Fadlee A. Rasid	AkramNHRSA23[7]
Mustafa Ismael Salman	AkramNHRSA23[7]
Abdulrahman M. Abdulghani	AkramNHRSA23[7]
Francisco Yuraszeck	YuraszeckMCCR23[406] YuraszeckMC23[405]
Elizabeth Montero	YuraszeckMCCR23[406]
Dario Canut-de-Bon	YuraszeckMCCR23[406] YuraszeckMC23[405]
Nicolás Cuneo	YuraszeckMCCR23[406]
Maximiliano Rojel	YuraszeckMCCR23[406]
Roberto Montemanni	MontemanniD23[268] MontemanniD23a[267]
Mauro Dell'Amico	MontemanniD23[268] MontemanniD23a[267]
Seyda Gür	GurPAE23[157]
Mehmet Pinarbasi	GurPAE23[157]
Haci Mehmet Alakas	GurPAE23[157]
Tamer Eren	GurPAE23[157]
Aftab Ahmed Shaikh	ShaikhK23[336]
Abdullah Ayub Khan	ShaikhK23 <sup>†</sup> 336 <sup>†</sup>
Levi Ribeiro de Abreu	AbreuNP23[90] AbreuN22[89]
Marcelo Seido Nagano	AbreuNP23[90] AbreuN22[89]
Eyüp Ensar Isik	IsikYA23[186]
Seyda Topaloglu Yildiz	IsikYA23[186] YunusogluY22[404]
Özge Satir Akpunar	IsikYA23[186]
Konstantin Schekotihin	TasselGS23[355] abs-2306-05747[356]
Gonzalo Mejía	YuraszeckMC23[405]
Guillaume Perez	PerezGSL23[299] abs-2312-13682[300]
Gaël Glorian	PerezGSL23[299]
Wijnand Suijlen	PerezGSL23[299] abs-2312-13682[300]
Arnaud Lallouet	PerezGSL23[299] abs-2312-13682[300]
Zahra Mehdizadeh-Somarin	Mehdizadeh-Somarin23[260]
Reza Tavakkoli-Moghaddam	Mehdizadeh-Somarin23 260 MokhtarzadehTNF20 264
Mohammad Rohaninejad	Mehdizadeh-Somarin23[260]
Behdin Vahedi Nouri	Mehdizadeh-Somarin23[260] MokhtarzadehTNF20[264]
Vilém Heinz	abs-2305-19888[170] HeinzNVH22[169]
Antonín Novák	abs-2305-19888[170] HeinzNVH22[169]
Gael Glorian	abs-2312-13682[300]
David Müller	MullerMKP22[272]
Marcus Gerhard Müller	MullerMKP22[272]
Dominik Kress	MullerMKP22[272]
Erwin Pesch	MullerMKP22[272]
Maximilian Pohl	PohlAK22[305]
Rainer Kolisch	PohlAK22[305]
Eric Bourreau	BourreauGGLT22[68]
Thierry Garaix	Bourreau GGLT 22 [68]
Matthieu Gondran	BourreauGGLT22[68]
Philippe Lacomme	BourreauGGLT22[68]
Nikolay Tchernev	BourreauGGLT22[68]
Ganguan Shi	ShiYXQ22[337]
Zhouwang Yang	Shi 7XQ22[337]

Table 3: Co-Authors of Articles/Papers

Author	Entries
Yang Xu	ShiYXQ22[337]
Yuchen Quan	ShiYXQ22[337]
Pinar Yunusoglu	YunusogluY22[404]
Kemal Subulan	SubulanC22[347]
Gizem Çakir	SubulanC22[347]
Soukaina Oujana	OujanaAYB22[292]
Lionel Amodeo	OujanaAYB22[292]
Farouk Yalaoui	OujanaAYB22[292] ArbaouiY18[12]
D. Brodart	OujanaAYB22[292]
Meriem Touat	TouatBT22[365]
Belaid Benhamou	TouatBT22[365]
Fatima Benbouzid-Si Tayeb	TouatBT22 365
Xingyang Li	${ m LiFJZLL22[231]}$
Jun Fu	LiFJZLL22[231]
Zixi Jia	LiFJZLL22[231]
Ziyan Zhao	LiFJZLL22[231] ZhangJZL22[410]
Siyi Li	LiFJZLL22[231]
Shixin Liu	LiFJZLL22[231] ZhangJZL22[410]
Haotian Zhang	ZhangJZL22[410]
Yingjun Ji	ZhangJZL22[410]
Xiaodong Li	abs-2211-14492[348]
Andreas T. Ernst	abs-2211-14492[348] ThiruvadyBME09[361]
Uwe Aickelin	abs-2211-14492[348]
Arthur Godet	Godet21a[142] GodetLHS20[143]
Hanaa Abohashima	AbohashimaEG21[2]
Amr B. Eltawil	AbohashimaEG21[2]
Mohamed S. Gheith	AbohashimaEG21[2]
Siyu Tang	VlkHT21[387]
Huali Fan	FanXG21[115]
Hegen Xiong	FanXG21[115]
Mark Goh	FanXG21[115]
Luping Zhang	ZhangYW21[411]
Chunxia Yu	Zhang YW21 [411]
T. N. Wong	ZhangYW21[411]
Felix Hübner	HubnerGSV21[184]
Patrick Gerhards	HubnerGSV21 184
Christian Stürck	HubnerGSV21 184
Rebekka Volk	HubnerGSV21 184
Ming Qin	QinWSLS21[314]
Runsen Wang	QinWSLS21[314]
Zhongshun Shi	QinWSLS21[314]
Lingxuan Liu	QinWSLS21[314]
Leyuan Shi	QinWSLS21[314]
Vaibhav Pandey	$\overline{\text{PandeyS21a}}$ [294]
Poonam Saini	PandeyS21a[294]
Till Bender	BenderWS21[47]
David Wittwer	BenderWS21 47
Thorsten Schmidt	BenderWS21[47]
Willian Tessaro Lunardi	Lunardi20[250]
Amelia Badica	BadicaBI20[23] BadicaBIL19[24]
Costin Badica	BadicaBI20[23] BadicaBIL19[24]
Mirjana Ivanovic	BadicaBI20[23] BadicaBIL19[24]
Leilei Meng	MengZRZL20[262]
Chaoyong Zhang	MengZRZL20[262]
Yaping Ren	MengZRZL20[262]
Biao Zhang	MengZRZL20[262]
0	

Table 3: Co-Authors of Articles/Papers

Author	Entries
Chang Lv	MengZRZL20[262]
Willian T. Lunardi	LunardiBLRV20[249]
Ernesto G. Birgin	LunardiBLRV20[249]
Débora P. Ronconi	LunardiBLRV20[249]
Holger Voos	LunardiBLRV20[249]
Tianbao Qin	QinDCS20[315]
Yuquan Du	QinDCS20[315]
Jiang Hang Chen	QinDCS20[315]
Mei Sha	QinDCS20[315]
Samira Alizdeh	$\widehat{\text{AlizdehS20[9]}}$
Shahram Saeidi	AlizdehS20[9]
Mahdi Mokhtarzadeh	MokhtarzadehTNF20[264]
Azadeh Farsi	MokhtarzadehTNF20 264
Oliver Polo-Mejía	Polo-MejiaALB20[306]
Virginie Basini	Polo-MejiaALB20[306]
David Sacramento	SacramentoSP20[322]
David Pisinger	SacramentoSP20 322
Mohammadreza Barzegaran	BarzegaranZP20[36]
Bahram Zarrin	BarzegaranZP20[36]
Paul Pop	BarzegaranZP20[36]
Juan M. Novas	Novas19[284] NovaraNH16[283] NovasH14[287] NovasH12[286] NovasH10[285]
Teresa Escobet	EscobetPQPRA19[110]
Vicenc Puig	EscobetPQPRA19[110]
Joseba Quevedo	EscobetPQPRA19[110]
Pere Palà-Schönwälder	EscobetPQPRA19[110]
Juli Romera	EscobetPQPRA19[110]
W. Adelman	EscobetPQPRA19[110]
Hiroki Nishikawa	NishikawaSTT19[282] NishikawaSTT18[280] NishikawaSTT18a[281]
Kana Shimada	NishikawaSTT19[282] NishikawaSTT18[280] NishikawaSTT18a[281]
Ittetsu Taniguchi	NishikawaSTT19[282] NishikawaSTT18[280] NishikawaSTT18a[281]
Hiroyuki Tomiyama	NishikawaSTT19[282] NishikawaSTT18[280] NishikawaSTT18a[281]
Jaroslaw Wikarek	Wikarek519[395]
Pawel Sitek	Wikarek\$19[395]
Nikolaus Frohner	FrohnerTR19[122]
Stephan Teuschl	FrohnerTR19[122]
Mary Tom	Tom19[363]
Jan Kristof Behrens	BehrensLM19[40] abs-1901-07914[41]
Ralph Lange	BehrensLM19[40] abs-1901-07914[41]
Masoumeh Mansouri	BehrensLM19[40] abs-1901-07914[41]
Doina Logofatu	BadicaBIL19[24]
Ke Liu	LiuLH19[238]
Sven Löffler	LiuLH19[238]
Petra Hofstedt	LiuLH19[238]
Hoonseok Park	ParkUJR19[297]
Jumyung Um	ParkUJR19[297]
Jae-Yoon Jung	ParkUJR19[297]
Martin Ruskowski	ParkUJR19[297]
O. M. Alade	abs-1902-01193[8]
A. O. Amusat	abs-1902-01195[6] abs-1902-01193[8]
Viktoria A. Hauder	abs-1902-01193[8] abs-1902-09244[160]
Andreas Beham	abs-1902-09244[100] abs-1902-09244[160]
Sebastian Raggl	abs-1902-09244[160]
Sophie N. Parragh	abs-1902-09244[160]
Michael Affenzeller	abs-1902-09244[160]
Yuanjie Tang	TangLWSK18[353]
Rengkui Liu	TangLWSK18[353]

Table 3: Co-Authors of Articles/Papers

Author	Entries
Futian Wang	TangLWSK18[353]
Quanxin Sun	TangLWSK18[353]
Amr A. Kandil	TangLWSK18[353]
Ridvan Gedik	GedikKEK18[132]
Darshan Kalathia	GedikKEK18[132]
Gokhan Egilmez	GedikKEK18[132]
Emre Kirac	GedikKEK18[132]
Shahrzad M. Pour	PourDERB18[308]
John H. Drake	PourDERB18[308]
Lena Secher Ejlertsen	PourDERB18[308]
Kourosh Marjani Rasmussen	PourDERB18[308]
Edmund K. Burke	PourDERB18[308]
Burak Gökgür	GokgurHO18[145]
Selin Özpevnirci	GokgurHO18[145]
Sicheng Zhang	ZhangW18[412]
Shouyang Wang	ZhangW18[412]
Seung Yeob Shin	ShinBBHO18[338]
Yuriy Brun	ShinBBHO18[338]
Hari Balasubramanian	ShinBBHO18[338]
Philip L. Henneman	ShinBBHO18[338]
Leon J. Osterweil	ShinBBHO18 338
Taha Arbaoui	ArbaouiY18[12]
Te-Wei Ho	HoYCLLCLC18[176]
Jia-Sheng Yao	HoYCLLCLC18[176]
Yao-Ting Chang	HoYCLLCLC18[176]
Feipei Lai	HoYCLLCLC18[176]
Jui-Fen Lai	HoYCLLCLC18 176
Sue-Min Chu	HoYCLLCLC18[176]
Wan-Chung Liao	HoYCLLCLC18[176]
Han-Mo Chiu	HoYCLLCLC18[176]
Franco M. Novara	NovaraNH16[283]
Gabriela P. Henning	NovaraNH16[283] NovasH14[287] NovasH12[286] NovasH10[285] ZeballosQH10[409] ZeballosH05[408] QuirogaZH05[317]
M. H. Fazel Zarandi	ZarandiKS16[407]
H. Khorshidian	ZarandiKS16 407
Mohsen Akbarpour Shirazi	ZarandiKS16 407
Vikas Goel	GoelSHFS15[144]
M. Slusky	GoelSHFS15[144]
Kevin C. Furman	GoelSHFS15[144]
Yufen Shao	GoelSHFS15[144]
Tao Wang	WangMD15[392]
Nadine Meskens	WangMD15[392]
David Duvivier	WangMD15[392]
Jinlian Zhou	ZhouGL15[416]
Ying Guo	ZhouGL15[416]
Guipeng Li	ZhouGL15[416]
Gerhard Friedrich	FriedrichFMRSST14[120]
Melanie Frühstück	FriedrichFMRSST14[120]
Vera Mersheeva	FriedrichFMRSST14[120]
Anna Ryabokon	FriedrichFMRSST14[120]
Maria Sander	FriedrichFMRSST14[120]
Andreas Starzacher	FriedrichFMRSST14[120]
Erich Teppan	FriedrichFMRSST14[120]
Mirza Omer Beg	BegB13[39]
Peter van Beek	BegB13[39] BegB13[39] MalikMB08[256]
Xujun Zhang	ZhangLS12[413]
Zhimin Ly	ZhangE312[413]
	01

Table 3: Co-Authors of Articles/Papers

Author	Entries
Xiaoqing Song	ZhangLS12[413]
Julien Menana	Menana11[261]
Nizar El Hachemi	HachemiGR11[158]
Michel Gendreau	HachemiGR11[158]
Seyda Topaloglu	TopalogluO11[364]
Irem Ozkarahan	TopalogluO11[364]
T. K. Feng	BeckFW11[38]
Jan Kelbel	Kelbel $\mathrm{H}11[198]$
Minhaz F. Zibran	ZibranR11[418] ZibranR11a[419]
Chanchal K. Roy	ZibranR11[418] ZibranR11a[419]
Luis Zeballos	ZeballosQH10[409] ZeballosH05[408] QuirogaZH05[317]
Oscar Quiroga	ZeballosQH10[409] QuirogaZH05[317]
Zheng Sun	SunLYL10[349]
Hong Li	SunLYL10 349
Min Yao	SunLYL10[349]
Nan Li	SunLYL10[349]
Kai-Ling Mak	MakMS10[253]
Jun Ma	MakMS10[253]
Wei Su	MakMS10[253]
Grzegorz Bocewicz	BocewiczBB09[56]
Irena Bach	BocewiczBB09[56]
Zbigniew Antoni Banaszak	BocewiczBB09[56]
Antonio Garrido	GarridoAO9[126] GarridoOS08[127]
Marlene Arangú	Garrido A (O9) [126]
Eva Onaindia	GarridoAO99[126] GarridoOS08[127]
Christian Blum	ThiruvadyBME09[361]
Bernd Meyer	ThiruvadyBME09[361]
Abid M. Malik	Malik08[255] MalikMB08[256]
Olivier Liess	LiessM08[232]
Óscar Sapena	GarridoOS08[127]
Jim McInnes	MalikMB08[256]
Willem Jan van Hoeve	
Carla P. Gomes	HoeveGSL07[373] GomesHS06[148] HoeveGSL07[373] GomesHS06[148]
Bart Selman	
	HoeveGSL07[373] GomesHS06[148]
Ghada El Khayat	KhayatLR06[200]
André Langevin	KhayatLR06[200]
Diane Riopel	KhayatLR06[200]
Suresh Sundaram	SureshMOK06[350]
V. Mani	SureshMOK06[350]
S. N. Omkar	SureshMOK06[350]
H. J. Kim	SureshMOK06[350]
Yang Qu	QuSN06[316]
Juha-Pekka Soininen	QuSN06[316]
Jari Nurmi	QuSN06[316]
Yuechang Liu	LiuJ06[240]
Yunfei Jiang	LiuJ06[240]
Wim Nuijten	BaptisteLPN06[27]
Ulrich Geske	Geske05[139]
Karen Villaverde	VillaverdeP04[386]
Christophe Wolinski	WolinskiKG04[399] WolinskiKG04a[400] KuchcinskiW03[218]
Krzysztof Kuchcinski	WolinskiKG04[399] WolinskiKG04a[400] KuchcinskiW03[218] GruianK98[155]
Maya B. Gokhale	WolinskiKG04[399] WolinskiKG04a[400]
John J. Kanet	KanetAG04[196]
Sanjay Ahire	KanetAG04[196]
Michael F. Gorman	KanetAG04[196]
Edward P. K. Tsang	Tsang03[368]

Table 3: Co-Authors of Articles/Papers

Author	Entries
Carmelo Del Valle	ValleMGT03[369]
Antonio A. Márquez	ValleMGT03[369]
Rafael M. Gasca	ValleMGT03[369]
Miguel Toro	ValleMGT03[369]
Colin J. Layfield	Layfield02[227]
Thomas Lorigeon	LorigeonBB02[248]
Jean-Louis Bouquard	LorigeonBB02[248]
Christian Timpe	Timpe02[362]
Kenny Qili Zhu	$\mathrm{Zhu} \hat{\mathrm{S}}02[\hat{4}17]$
Andrew E. Santosa	$\mathrm{ZhuS}02 417 $
Fae Martin	MartinPY01[258]
Arthur Pinkney	MartinPY01[258]
Xinghuo Yu	MartinPY01[258]
Andrew J. Mason	Mason01[259]
Ouajdi Korbaa	KorbaaYG00[207] LopezAKYG00[247] KorbaaYG99[206]
Pascal Yim	KorbaaYG00[207] LopezAKYG00[247] KorbaaYG99[206]
Jean-Claude Gentina	KorbaaYG00 207  LopezAKYG00 247  KorbaaYG99 206
Hassane Alla	LopezAKYG00[247]
Joseph C. Pemberton	PembertonG98[298]
Flavius Galiber III	Pemberton G98 [298]
Flavius Gruian	GruianK98[155]
Moreno Falaschi	FalaschiGMP97[114]
Kim Marriott	FalaschiGMP97[114]
Catuscia Palamidessi	FalaschiGMP97[114]
Eric Boucher	BoucherBVBL97[66]
Astrid Bachelu	BoucherBVBL97[66]
Christophe Varnier	BoucherBVBL97[66] BaptisteLV92[30]
Pierre Baptiste	BoucherBVBL97[66] BaptisteLV92[30]
Bruno Legeard	BoucherBVBL97[66] BaptisteLV92[30]
Silvia Breitinger	BreitingerL95[69]
Hendrik C. R. Lock	Breitinger 1,95 [69]
Jean Jourdan	JourdanFRD94[187]
François Fages	JourdanFRD94[187]
Didier Rozzonelli	JourdanFRD94[187]
Alain Demeure	JourdanFRD94[187]
David B. H. Tay	Tay92[357]
M. Anton Ertl	ErtlK91[109]
Andreas Krall	ErtlK91[109]
Nicolas Bonifas	BaptisteB18[26]
Mariem Trojet	TrojetHL11[367]
Fehmi H'Mida	TrojetHL11[367]
Martin Aronsson	AronssonBK09[15]
Markus Bohlin	AronssonBK09[15]
Per Kreuger	AronssonBK09[15]
Gunnar Schrader	WolfS05[398]
François Roubellat	ArtiguesR00[17]
Abderrahmane Aggoun	Araguan Bog[17] Aggoun Bog[5]
Eric Sanlaville	Regolation   1860   186
Yunbo Li	Madi-WambaLOBM17[252]
Anne-Cécile Orgerie	Madi-WambaLOBM17[252]
Jean-Marc Menaud	Madi-WambaLOBM17[252]
Mehmet Dincbas	Madi-walload   Mil   Madi-walload   Mil
	2.110041001100[101]

5 Problem Classification

Table 4: 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 5: Keywords by Work and Domains								
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
AalianPG23 [1]	scheduling, order, activity, resource, machine, preempt, transportation, make span, flow shop		cumulative, nooverlap, end- beforestart, alwaysin		cplex, cpo		mining industry	real world	
AbohashimaEG21 [2]	scheduling, order, resource, machine, transportation, cmax, setup time	parallel machine		python	gurobi			generated instance, real world, https://, github	
AbreuN22 [89]	scheduling, order, job, task, resource, machine, preempt, transportation, inventory, make span, cmax, completion time, flow time, tardiness, flow shop, job shop, open shop, setup time, distributed, batch process	single machine, OSSP, Open Shop Schedul- ing Problem	cumulative, nooverlap	python	cplex			benchmark, real world, http://, https://	
AbreuNP23 [90]									
AbrilSB05 [3]	scheduling, order, distributed, multi agent							http://	
Acuna-AgostMFG09 [4]	scheduling, order, transporta- tion, re scheduling								
AggounB92 [5] AkkerDH07 [370]	scheduling, order, job, resource, machine, precedence, preempt, sequence dependent setup, make span, cmax, completion time, lateness, release date, due date	RCPSP, sin- gle machine, parallel machine	${ m cumulative}$		cplex				
AkramNHRSA23 [7]	scheduling, order, task, resource, machine, preempt, completion time, distributed		bin packing	python	or tools			benchmark, https://	
AlesioNBG14 [99]	scheduling, order, job, task, activity, resource, preempt, make span, completion time, job shop, open shop, distributed		alldifferent		cplex, OPL			benchmark, http://	
AlizdehS20 [9]									
AngelsmarkJ00 [10]	scheduling, order, job, task, resource, job shop								
AntuoriHHEN21 [11]	scheduling, order, job, task, resource, machine, precedence, transportation, tardiness, job shop, release date, due date			java , C++	gecode, choco		automotive industry	supplementary material, http://, https://, gitlab	
ArbaouiY18 [12]	scheduling, order, job, resource, machine, sequence dependent setup, make span, cmax, comple- tion time, setup time	single machine, parallel machine	alternative constraint, cumulative, nooverlap	C++	cplex			benchmark, https://	

	Table 5: Keywords by Work and Domains										
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm		
ArmstrongGOS21 [13]	scheduling, order, job, task, resource, machine, precedence, preempt, sequence dependent setup, transportation, make span, cmax, completion time, flow shop, job shop, setup time	HFF	alternative con- straint, cumula- tive, diffn, table constraint, cir- cuit, bin pack- ing	java , prolog	cplex, gecode, CHIP, cpo, chuffed, sicstus, mini zinc		packaging i dustry	benchmark, instance genera- tor, real world, industrial part- ner, industry partner, supple- mentary mate- rial, https://, zenodo	energetic rea- soning		
ArmstrongGOS22 [14]	scheduling, order, job, task, resource, machine, transportation, make span, cmax, completion time, flow shop, re scheduling	parallel ma- chine, HFF	cumulative, nooverlap	prolog	OPL, sicstus			benchmark, real world, https://			
AronssonBK09 [15]	order, job, task, transportation, job shop		cumulative	prolog	cplex, CHIP			real world, real life, http://	sweep		
ArtiguesBF04 [16]	scheduling, order, job, resource, machine, precedence, preempt, sequence dependent setup, make span, cmax, completion time, job shop, release date, setup time, batch process		disjunctive	C++	ilog solver, ilog scheduler			benchmark	edge finding		
ArtiguesR00 [17]	scheduling, order, job, activity, resource, machine, precedence, preempt, no preempt, transportation, make span, cmax, completion time, lateness, earliness, job shop, release date, due date, setup time, re scheduling	RCPSP	cumulative, dis- junctive								
ArtiouchineB05 [18]	scheduling, order, job, activity, resource, machine, precedence, preempt, make span, completion time, job shop, open shop, release date, re scheduling	single machine, parallel machine	cumulative, dis- junctive		ilog scheduler			generated instance, ran- dom instance, http://	edge finding, not first, not last		
Astrand0F21 [20]	scheduling, order, job, task, activity, resource, machine, precedence, make span, job shop, open shop		disjunctive		gecode		mineral indu try, mini industry, pota industry	ng generated in-			
Astrand21 [19] AstrandJZ18 [21]	scheduling, order, task, activity,	single machine	cumulative, dis-		gecode		potash indust	y https://	time tabling		
	resource, machine, make span		junctive		_		•	- ,,	time tabing		
AstrandJZ20 [22]	scheduling, order, job, task, activity, resource, machine, precedence, make span, completion time, flow shop, job shop, open shop, due date, setup time, rescheduling	parallel machine	alldifferent, disjunctive	C++	gecode		mineral indu try, mini industry, pota industry	ng real world, real			
BadicaBI20 [23] BadicaBIL19 [24]											
Baptiste09 [25]	scheduling										
BaptisteB18 [26]	scheduling, order, job, task, resource, machine, precedence, preempt, make span, manpower, lazy clause generation	RCPSP, psplib, parallel machine	cumulative, bin packing		CHIP			http://	edge finder, edge finding, time tabling		
BaptisteLPN06 [27] BaptisteLV92 [30]											

				words by Work and					
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
BaptisteP00 [29]	scheduling, order, job, task, activity, resource, precedence, preempt, make span, cmax, flow shop, job shop, release date, due date, re scheduling	RCPSP	cumulative, dis- junctive	C++	CHIP, claire, ilog scheduler			benchmark, http://	edge finder edge finding energetic rea- soning
BaptisteP97 [28]	scheduling, order, job, task, activity, resource, precedence, preempt, make span, flow shop, job shop, release date, due date, rescheduling	RCPSP	cumulative, dis- junctive	C++	CHIP, claire			benchmark	edge finder edge finding
BarlattCG08 [31]	scheduling, job, task, resource, machine, transportation, flow shop, job shop, setup time							real world	
Bartak02 [33]	scheduling, order, job, task, activity, resource, machine, precedence, make span, lateness, earliness, job shop, continuous process		cumulative, dis- junctive	prolog	sicstus			real life, http://	edge finding time tabling
Bartak02a [32]	scheduling, order, job, task, activity, resource, machine, precedence, make span, tardiness, earliness, job shop, re scheduling		cumulative, dis- junctive		ilog scheduler			benchmark, real life, http://	edge finding time tabling
BartakS11 [34]	scheduling, order, task, resource, distributed, multi agent		cumulative		OPL			random instance, real world, real life, http://	
BartoliniBBLM14 [35]	scheduling, job, task, activity, resource, machine, make span, tardiness		alternative con- straint, cumula- tive					http://	
BarzegaranZP20 [36]	scheduling, order, task, resource, machine, distributed, re schedul- ing			java	or tools			http://, https://	
BeckDF97 [37]	scheduling, order, job, task, activity, resource, machine, precedence, inventory, make span, job shop, release date, due date, rescheduling	single machine	cumulative					benchmark, real world	edge finding
BeckFW11 [38] BegB13 [39]									
BehrensLM19 [40]	scheduling, order, task, resource, machine, make span, setup time, distributed, multi agent			python	or tools, mini			real world, http://, https://, github	
BeldiceanuC02 [42]	scheduling, order, task, activity, resource, machine, producer consumer	single machine	cumulative	prolog	CHIP, sicstus			benchmark, ran- dom instance, real life	sweep
BeldiceanuCDP11 [43]	scheduling, order, task, resource, preempt, cmax		cumulative, dis- junctive, diffn, bin packing	prolog	CHIP, sicstus			benchmark, http://	edge finding energetic rea- soning, sweep
BeldiceanuCP08 [44]	scheduling, order, task, resource		cumulative, dis- junctive	prolog	CHIP, sicstus			benchmark	edge finding sweep
BeldiceanuP07 [45]	scheduling, order, task, resource, preempt, release date, due date		cumulative, dis- junctive						sweep

Table 5: Keywords by Work and Domains									
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
BelhadjiI98 [46]	scheduling, order, job, task, resource, machine, precedence, preempt, job shop, release date, due date	JSSP, TCSP, Temporal Constraint Satisfaction Problem	disjunctive					real life	
BenderWS21 [47]	scheduling, order, job, task, activity, resource, machine, preempt, make span, setup time, distributed	RCPSP	nooverlap	python				https://	
BenediktMH20 [48]	scheduling, order, job, task, machine, preempt, job shop, rescheduling	single machine	nooverlap, end- beforestart		gurobi			benchmark, generated instance, ran- dom instance, https://, github	
BenediktSMVH18 [49]	scheduling, order, job, resource, machine, preempt, job shop	single machine, parallel machine	nooverlap		gurobi			generated instance, ran- dom instance, https://, github	
BeniniBGM06 [50]	scheduling, order, task, activity, resource, precedence, make span, tardiness, setup time, distributed		cumulative		cplex, eclipse, ilog solver			real life	
BensanaLV99 [51]	order				cplex, ilog solver			benchmark, http://	
BertholdHLMS10 [52]	scheduling, order, job, resource, precedence, preempt, completion time	RCPSP, psplib	cumulative, dis- junctive		cplex			http://	
BessiereHMQW14 [53]	scheduling, order, job, task, resource, machine, setup time		alldifferent		choco		textile industry	benchmark, real life, http://	
BillautHL12 [54]	scheduling, order, job, resource, machine, precedence, make span, cmax, completion time, tardiness, flow shop, job shop, open shop, release date, due date, setup time	single machine			cplex, mistral			random instance	
Bit-Monnot23 [55]	scheduling, order, job, task, activity, resource, machine, precedence, make span, job shop, open shop, distributed, lazy clause generation	OSP, Open Shop Schedul- ing Problem	cumulative, dis- junctive		mistral, or tools, cpo, mini zinc			benchmark, real world, https://, github	
BocewiczBB09 [56] BofillCSV17 [57]	scheduling, order, activity, re-	RCPSP, psplib	cumulative		Z3			benchmark,	energetic rea
20.11100 (11 [01]	source, machine, precedence, preempt, make span, cmax, lazy clause generation	Total of , papilo	Camaragive		20			http://	soning
BofillEGPSV14 [58]	scheduling, order, task, machine, lazy clause generation				cplex, gecode, mini zinc			industrial instance, http://	time tabling
BofillGSV15 [59]	scheduling, order, machine				cplex			industrial instance, http://	time tabling
BogaerdtW19 [371]	scheduling, order, job, machine, precedence, completion time, tardiness, job shop, setup time	single machine, parallel machine	nooverlap	С	cplex			benchmark, http://, https://	
Bonfietti16 [60]	· · · · · · · · · · · · · · · · · · ·								

Table 5: Keywords by Work and Domains									
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
BonfiettiLBM11 [61]	scheduling, order, job, task, activity, resource, machine, precedence, make span, job shop	RCPSP	cumulative		ilog solver			benchmark, generated instance, indus- trial instance, http://	
BonfiettiLBM12 [62]	scheduling, order, job, activity, resource, machine, precedence, make span, job shop, distributed	RCPSP	cumulative		ilog solver			benchmark, http://	time tabling
BonfiettiLM14 [63]	scheduling, order, job, task, activity, resource, machine, precedence, make span, job shop, open shop, distributed	RCPSP, psplib	cumulative					benchmark, real world, http://	
BonfiettiZLM16 [64]	scheduling, order, activity, resource, precedence, make span	RCPSP	cumulative, dis- junctive		or tools		automotive in- dustry, control system industry	benchmark, generated instance, indus- trial instance, real world, https://, github	edge finder, sweep
BoothNB16 [65]	scheduling, order, task, activity, resource, machine, precedence, distributed, re scheduling		cumulative, disjunctive, nooverlap	C++	cplex			real world	
BoucherBVBL97 [66]	, and a second		·						
BoudreaultSLQ22 [67]	scheduling, order, task, activity, resource, machine, precedence, preempt, transportation, make span, cmax, distributed, lazy clause generation	RCPSP, psplib	cumulative, dis- junctive		or tools, chuffed, mini zinc		ship repair in- dustry	benchmark, generated in- stance, real world, real life, industrial partner, supple- mentary mate- rial, https://, github, gitlab	edge finding, not first, not last, energetic reasoning
BourreauGGLT22 [68] BreitingerL95 [69]									
BurtLPS15 [70]	scheduling, order, job, task, resource, machine, precedence, make span, completion time, tardiness, job shop	single machine, parallel machine	cumulative		cplex, gurobi, gecode, mini zinc			benchmark, real world, industry partner, http://	
Caballero23 [71]	scheduling, resource	RCPSP						http://, https://	
CampeauG22 [72]	scheduling, order, job, task, activity, resource, precedence, make span, completion time	RCPSP, RCP- SPDC	cumulative, nooverlap, end- beforestart, alwaysin	python	cplex		mining industry	real world, real life, https://	edge finding
CappartS17 [73]	scheduling, order, job, task, activity, resource, machine, precedence, completion time, job shop, re scheduling	TMS	alternative con- straint, cumula- tive, nooverlap, span constraint		OPL			random instance, real life, https://, bitbucket	
CarchraeBF05 [74]	scheduling, order, task, make span								
Caseau97 [75]	scheduling, order, job, task, resource, preempt, make span, job shop		cumulative					benchmark	edge finding

Table 5: Keywords by Work and Domains										
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm	
CauwelaertDMS16 [76]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, sequence dependent setup, make span, completion time, job shop, setup time, batch process		cumulative, dis- junctive	java				benchmark, real life, http://, https://, bit- bucket	edge finding, not first, not last	
CestaOS98 [77] ChapadosJR11 [78]	scheduling, job, resource scheduling, order, task, activity		cumulative				noto:1 in decotors		tima a tablima	
ChuX05 [79]	scheduling, order, task, activity scheduling, order, job, resource, machine, completion time, re- lease date, due date	single machine	cumulative, dis- junctive		eclipse		retail industry		time tabling	
CireCH13 [80]	scheduling, order, job, task, resource, machine, precedence, make span, tardiness		cumulative, cir- cuit		cplex, OPL					
ClercqPBJ11 [81]	scheduling, order, activity, resource, precedence, completion time, release date, due date, distributed		alldifferent, cu- mulative	java	choco, CHIP			benchmark, http://	edge finding, energetic rea- soning, time tabling, sweep	
CobanH10 [82]	scheduling, order, job, pre- empt, make span, tardiness, dis- tributed, re scheduling		disjunctive, cir- cuit		cplex, OPL					
ColT19 [83]	scheduling, order, job, resource, machine, precedence, make span, earliness, job shop	JSSP	disjunctive, nooverlap	java	or tools, cp mini zinc	ο,		benchmark, real world, http://, https://, github		
Colombani96 [84]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, job shop, release date, due date		disjunctive		CHIP			. ,,,,		
DannaP03 [85]	scheduling, order, job, activity, resource, machine, tardiness, earliness, job shop		disjunctive		solver, ile scheduler	og og		benchmark		
Darby- DowmanLMZ97 [86]	scheduling, order, task, resource, machine, make span	single machine, MGAP	disjunctive, span constraint	prolog	cplex, eclipse			benchmark, real world, real life, http://		
Davenport10 [87]	scheduling, order, resource, com- pletion time, tardiness, earliness, release date, due date				cplex					
DavenportKRSH07 [88]	scheduling, order, job, activity, resource, machine, precedence, preempt, sequence dependent setup, make to order, inventory, job shop, setup time		disjunctive, bin packing	C++	cplex, CHIP		steel industry			
Dejemeppe16 [91] DejemeppeCS15 [92]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, sequence dependent setup, make span, completion time, tardiness, job shop, release date, setup time	single machine	cumulative, disjunctive					benchmark, generated in- stance, real world, http://, https://, bit- bucket	edge finding, not first, not last	
DejemeppeD14 [93]	scheduling, order, job, activity, resource, precedence, make span, job shop, setup time		cumulative					https://, bit- bucket		
Demassey03 [94]										
DemirovicS18 [95]	scheduling, order, task, activity, resource, precedence		cumulative, disjunctive		gurobi, mi zinc	ni		benchmark, real world, http://, https://	time tabling	

Table 5: Keywords by Work and Domains										
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm	
Derrien15 [96]										
DerrienP14 [97]	scheduling, order, activity, resource, make span	psplib, CuSP	cumulative	java	choco			random instance	edge finding, energetic rea- soning, sweep	
DerrienPZ14 [98]	scheduling, order, job, activity, resource, machine, precedence, make span, re scheduling	RCPSP, CuSP	cumulative		choco, CHIP			benchmark, random in- stance, real world, http://	sweep	
DilkinaDH05 [100]	scheduling, order, job, machine, precedence, make span, job shop							http://		
DincbasSH90 [101]	scheduling, order, job, task, resource, machine, precedence, job shop, distributed		disjunctive, circuit	prolog	OPL, CHIP			real life		
DoomsH08 [102]	scheduling, order, job, task, activity, resource, machine, completion time, job shop	RCPSP					services indus- try			
DoulabiRP14 [103]	scheduling, order, task, activity, resource, due date		bin packing		cplex					
DoulabiRP16 [104]										
EdisO11 [105]	scheduling, job, task, activity, resource, machine, preempt, make span, completion time, flow time, lateness, tardiness, earliness, due date	parallel machine	cumulative, nooverlap, bin packing		cplex, OPL					
EfthymiouY23 [106]	scheduling, order, job, task, machine, make span, job shop, setup time, re scheduling	JSSP, CHSP	cumulative, dis- junctive	python	or tools			benchmark, generated instance, ran- dom instance, industrial in- stance, real life, https://		
ElkhyariGJ02 [107]	scheduling, task, activity, resource, machine, precedence, preempt, make span, due date, rescheduling	RCPSP	cumulative, dis- junctive, table constraint					• ,,		
ElkhyariGJ02a [108]	scheduling, order, task, activity, resource, precedence, open shop, due date, re scheduling	RCPSP, psplib	cumulative, dis- junctive					benchmark, real life, http://	time tabling	
ErtlK91 [109]	scheduling, order, task, resource, machine, setup time			prolog				benchmark, real world		
EscobetPQPRA19 [110]	scheduling, order, job, task, activity, resource, machine, job shop, release date, due date, distributed, batch process		alternative constraint, circuit, nooverlap		cplex, OPL		food industry, manufacturing industry	http://, https://		
EvenSH15 [111]	scheduling, order, task, resource, machine, preempt, transportation, completion time, distributed		cumulative, dis- junctive		choco			real world, real life, http://	sweep	
EvenSH15a [112]	scheduling, order, task, resource, machine, preempt, transportation, completion time, distributed		cumulative, dis- junctive	java	choco			real world, real life, http://	sweep	

			Table 5: Key	words by Work and	Domains				
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
FahimiOQ18 [113]	scheduling, order, job, task, resource, machine, precedence, preempt, sequence dependent setup, make span, completion time, lateness, job shop, open shop, due date, setup time, distributed, lazy clause generation, batch process	RCPSP, psplib	alldifferent, cumulative, disjunctive		choco			benchmark, random instance, https://	edge finding, not first, not last, time tabling, sweep
FalaschiGMP97 [114]	scheduling, order			prolog					
FanXG21 [115]	scheduling, order, job, task, resource, machine, precedence, preempt, no preempt, make span, completion time, flow time, tardiness, earliness, flow shop, job shop, due date, setup time, distributed, batch process	single machine, parallel machine		java , python	cplex, gurobi, eclipse		manufacturing industry	benchmark, https://	max flow
FetgoD22 [116]	scheduling, order, task, resource, precedence, preempt, make span, cmax, completion time, lazy clause generation	RCPSP, CuSP	${ m cumulative}$	java , python	choco, CHIP			benchmark, real world, http://, https://	edge finder, edge finding, not first, not last, energetic reasoning, time tabling, sweep
FontaineMH16 [117]	scheduling, order, job, task, resource, machine, precedence, make span, completion time, job shop	parallel machine	disjunctive		gurobi, CHIP, mini zinc			benchmark, https://	, , , , , , , , , , , , , , , , , , ,
FortinZDF05 [118]	scheduling, order, task, activity, resource, precedence, make span, temporal constraint reasoning	psplib						http://	
FrankK05 [119]	scheduling, order, job, task, resource, precedence, due date							benchmark	
FriedrichFMRSST14 [120]			1	.1	, ,				
FrimodigS19 [121]	scheduling, order, job, task, resource, machine, job shop		cumulative, reg- ular expression, bin packing	python	cplex, gecode, mini zinc			benchmark, real world, https://	
FrohnerTR19 [122]	scheduling, order, distributed		i d	java , python	gurobi, gecode, mini zinc			benchmark, real world, https://	
FrostD98 [123] GalleguillosKSB19 [124]	scheduling, order, job, activity, resource, machine, make span, distributed, re scheduling	JSSP	alternative con- straint, cumula- tive	python	or tools		power industry	http://, https://	
GarganiR07 [125]	order, resource, machine, inventory		bin packing	C++	OPL		steel industry	real life, http://	
GarridoAO09 [126]	scheduling, order, task, resource, precedence, make span, rescheduling		disjunctive	java	choco, cpo			benchmark, http://	
GarridoOS08 [127]	scheduling, order, task, activity, resource, machine, make span			java , c	choco, cpo			real world, http://	
GayHLS15 [128]	scheduling, order, task, activity, resource, precedence, make span	RCPSP, psplib, OSP	cumulative, dis- junctive					benchmark, bit- bucket	edge finding, time tabling
GayHS15 [129]	scheduling, order, task, resource, precedence, preempt		cumulative, dis- junctive, table constraint		gecode, choco, or tools			http://, https://, bit- bucket	time tabling, sweep

Table 5: Keywords by Work and Domains											
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm		
GaySS14 [131]	scheduling, order, job, activity, resource, machine, precedence, make span, completion time, job shop, setup time, manpower, continuous process		cumulative, disjunctive					real life	sweep		
GedikKEK18 [132]	scheduling, order, job, task, resource, machine, preempt, sequence dependent setup, transportation, make span, cmax, completion time, tardiness, due date, setup time	single ma- chine, parallel machine, PMSP	cumulative, nooverlap		cplex		manufacturing industry	benchmark, http://, https://			
GeibingerKKMMW21 [133	scheduling, distributed				cplex, gurobi, gecode, or tools, mini zinc		pharmaceutical industry	real world, http://, https://			
GeibingerMM19 [135]	scheduling, order, job, task, activity, resource, precedence, make span, completion time, re- lease date, due date, re schedul- ing	RCPSP	alternative con- straint, cumula- tive, nooverlap, endbeforestart	java	cplex, gecode, cpo, mini zinc			benchmark, generated in- stance, real world, real life, industrial part- ner, http://, https://	time tabling		
GeibingerMM21 [136]	scheduling, order, job, task, activity, resource, machine, precedence, completion time, tardiness, release date, due date, lazy clause generation	RCPSP	cumulative, dis- junctive		cplex, cpo, chuffed			benchmark, generated in- stance, real world, real life, github	time tabling		
GeitzGSSW22 [137]	scheduling, order, job, task, resource, machine, precedence, preempt, sequence dependent setup, transportation, make span, completion time, lateness, job shop, setup time, producer consumer, lazy clause generation, batch process	RCPSP, single machine, JSSP	cumulative		OPL			real world, real life, http://, https://, github	not last, sweep		
GelainPRVW17 [138]	scheduling, order, resource							benchmark, real life, http://			
Geske05 [139]	scheduling, order, job, task, activity, resource, machine, lateness, job shop, distributed, rescheduling		cumulative	prolog	CHIP, sicstus			real life, http://			
GilesH16 [140]	scheduling, order, task, activity, resource, transportation, inventory, setup time		cumulative, dis- junctive		cplex		chemical indus- try, chemical processing in- dustry, petro chemical indus- try				
GingrasQ16 [141] Godet21a [142]							,				
GodetLHS20 [143]	scheduling, order, job, task, resource, machine, make span, cmax, completion time, release date, setup time, lazy clause generation	single ma- chine, parallel machine, PMSP	alldifferent, cumulative, disjunctive, bin packing		choco, CHIP, chuffed			benchmark, generated in- stance, real life, https://, github	not last, time tabling		

Table 5: Keywords by Work and Domains									
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
GoelSHFS15 [144]	scheduling, order, task, activity, resource, machine, precedence, transportation, inventory, setup time		cumulative, disjunctive, nooverlap, alwaysin		cplex, OPL, cpo			http://	
GokgurHO18 [145]									
GoldwaserS17 [146]	scheduling, order, resource, ma- chine, transportation, due date, lazy clause generation		cumulative, dis- junctive	python	gurobi, gecode		steel industry	generated instance, instance generator, http://, https://, github	
Goltz95 [147]	scheduling, order, job, task, resource, machine, precedence, completion time, job shop, due date		cumulative, dis- junctive	prolog	СНІР			benchmark	edge finding
GomesHS06 [148]	scheduling, order, task, dis- tributed, multi agent				ilog solver			real life	
GrimesH10 [149]	scheduling, order, job, task, resource, machine, precedence, sequence dependent setup, make span, cmax, flow shop, job shop, open shop, setup time, batch process	Open Shop Scheduling Problem	cumulative, disjunctive				steel industry	benchmark	edge finding, time tabling
GrimesH11 [150]	scheduling, order, job, task, resource, machine, precedence, make span, cmax, completion time, tardiness, earliness, flow shop, job shop, open shop, release date, due date, lazy clause generation	RCPSP	cumulative, dis- junctive		cplex, ilog solver, ilog scheduler			benchmark, http://	edge finding
GrimesHM09 [151]	scheduling, order, job, task, resource, machine, precedence, make span, job shop, open shop	OSP, Open Shop Schedul- ing Problem	disjunctive	java	choco, mistral, ilog scheduler			benchmark	edge finding, not last
GrimesIOS14 [152]	scheduling, order, task, activity, resource, machine, preempt, completion time, due date, distributed, re scheduling		disjunctive		cplex, CHIP			real world, real life, http://	
GroleazNS20 [154]	scheduling, order, job, resource, machine, precedence, preempt, inventory, tardiness, job shop, release date, due date, setup time	GCSP	cumulative, circuit, nooverlap		or tools, cpo		food industry	benchmark, industrial in- stance, https://	
GroleazNS20a [153] GruianK98 [155]	scheduling, order, task, activity, resource, re scheduling		cumulative, diffn, circuit		CHIP			benchmark	
GuSS13 [156]	scheduling, order, activity, resource, machine, precedence, make span, distributed, lazy clause generation	single machine	cumulative					benchmark	edge finder, edge finding, time tabling
GurPAE23 [157]	scheduling, order, resource, ma- chine, inventory, distributed, re- scheduling		cumulative		cplex			real life, https://	
HachemiGR11 [158]	scheduling, order, job, task, activity, resource, precedence, transportation, make span, job shop		alldifferent		cplex, OPL, ilog scheduler		food industry		

			Table 5: Key	words by Work and	Domains						
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	S	Benchmarks	Algorithm	1
HanenKP21 [159]	scheduling, order, job, task, resource, machine, precedence, preempt, make span, cmax, com- pletion time, lateness, tardiness, job shop, release date, due date	RCPSP, parallel machine, CuSP	$\operatorname{cumulative}$	python	claire				generated instance, ran- dom instance, https://	energetic soning	rea-
He0GLW18 [161]	scheduling, order, machine, precedence, transportation, distributed, multi agent, re scheduling			python	gurobi				real world, http://, https://, bit- bucket		
HebrardTW05 [162]	scheduling, order, job, machine, job shop										
HechingH16 [163]	scheduling, order, job, task, manpower, re scheduling		circuit, noover- lap		cplex, OPL				real world		
HeinzB12 [164]	scheduling, order, job, activity, resource, machine, precedence, completion time, tardiness, ear- liness, release date, due date	single machine	alternative constraint, cumulative		cplex, OPL, ilog solver, ilog scheduler						
HeinzKB13 [165]	scheduling, order, job, resource, machine, tardiness, job shop, re- lease date	single machine	cumulative		cplex						
HeinzNVH22 [169]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, sequence dependent setup, make span, completion time, flow shop, setup time, distributed, re scheduling	parallel machine	alternative constraint, cumulative, nooverlap		gurobi				benchmark, generated in- stance, real world, http://, https://, gitlab		
HeinzS11 [167]	scheduling, order, job, resource, machine, preempt, completion time	RCPSP, psplib	cumulative, dis- junctive		cplex				benchmark, http://	energetic soning, tabling	rea- time
HeinzSB13 [168]	scheduling, order, job, resource, machine, precedence, preempt, completion time, release date, due date	RCPSP, psplib, single machine	cumulative, dis- junctive		cplex, mini zinc				benchmark, http://	edge fi time tabli	
HeinzSSW12 [166]	order, task, inventory		bin packing		cplex		process dustry, industry	in- steel	real world, http://		
HeipckeCCS00 [171]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, make span, completion time, job shop, release date, due date	RCPSP, single machine	cumulative, dis- junctive						benchmark, instance genera- tor, http://		
HentenryckM04 [172]	scheduling, order, job, task, activity, resource, machine, precedence, make span, completion time, tardiness, job shop, open shop, due date		cumulative, dis- junctive						benchmark		
HentenryckM08 [173] HermenierDL11 [174]	order scheduling, order, task, resource, machine, precedence, completion time, producer consumer, dis- tributed		bin packing all different, cumulative, dis- junctive, table constraint, bin packing		choco				http://		

Table 5: Keywords by Work and Domains											
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm		
HillTV21 [175]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, make span, flow shop, release date, lazy clause generation	RCPSP, psplib, single machine	alternative constraint, cumulative					real world, https://			
HoYCLLCLC18 [176]	- C										
HoeveGSL07 [373]	scheduling, order, job, task, re- source, machine, precedence, job shop, distributed, multi agent, re scheduling		disjunctive		cplex, ilog scheduler			benchmark, http://	edge finding		
Hooker04 [177]	scheduling, order, task, resource, machine, precedence, make span, tardiness, release date, dis- tributed		cumulative, dis- junctive, circuit		cplex, OPL, ilog scheduler			random instance			
Hooker05 [178]	scheduling, order, job, task, resource, machine, precedence, make span, tardiness, release date, due date, distributed		cumulative, dis- junctive, circuit		cplex, OPL, ilog scheduler			random instance	edge finding		
Hooker06 [180]	scheduling, order, job, task, resource, machine, precedence, make span, tardiness, release date, due date		cumulative, dis- junctive, circuit		cplex, OPL, ilog scheduler			random instance, http://			
Hooker17 [181]	scheduling, order, job, resource, tardiness, due date		circuit					benchmark, ran- dom instance			
HookerY02 [182]	scheduling, order, job, resource, machine	RCPSP	cumulative, dis- junctive					http://			
HoundjiSWD14 [183]	scheduling, order, resource, ma- chine, precedence, transporta- tion, inventory, due date	single machine	circuit					generated instance, http://, https://, bitbucket			
HubnerGSV21 [184]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, transportation, inventory, make span, cmax, completion time, tardiness, due date	RCPSP, RCP- SPDC	alternative con- straint, cumula- tive, endbefor- estart	С	cplex, gurobi			benchmark, real life, http://, https://			
IfrimOS12 [185]	scheduling, order, job, task, resource, machine, due date, distributed, re scheduling		disjunctive					real life, http://			
IsikYA23 [186]	scheduling, order, job, task, resource, machine, precedence, preempt, sequence dependent setup, transportation, make span, cmax, completion time, tardiness, earliness, flow shop, job shop, release date, due date, setup time, distributed, batch process	single machine, parallel machine	cumulative, cir- cuit, nooverlap, endbeforestart		cplex, OPL		steel industry	benchmark, generated in- stance, real world, real life, http://, https://	energetic rea- soning		
JourdanFRD94 [187] JuvinHHL23 [188]	scheduling, order, job, task, resource, machine, precedence, preempt, make span, cmax, completion time, flow shop, job shop, due date, setup time	parallel machine, JSSP	alldifferent, cumulative, disjunctive, nooverlap, endbeforestart	C++	mistral, cpo			benchmark, supplemen- tary mate- rial, http://, https://, github	edge finding, not first, not last		

			Table 5: Key	words by Work and	Domains				
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
JuvinHL23 [189]	scheduling, order, job, task, machine, precedence, make span, cmax, completion time, tardiness, flow shop, job shop, setup time		nooverlap, end- beforestart		cplex, cpo			real world, https://	
KamarainenS02 [190]	scheduling, order, job, activity, resource, machine, precedence, preempt, transportation, earli- ness, job shop	KRFP			eclipse			benchmark, real world, http://	
Kameugne15 [191]	scheduling, task, resource, pre- empt, completion time		cumulative					http://	edge finding, not first, not last
KameugneFGOQ18 [192]	scheduling, order, task, resource, precedence, make span, cmax, completion time	RCPSP, CuSP	cumulative, disjunctive	java	choco, CHIP			benchmark, real world, http://, https://	not first, not last, energetic reasoning, time tabling, sweep
KameugneFND23 [193]	scheduling, order, task, resource, machine, precedence, preempt, make span, cmax, completion time, lazy clause generation	RCPSP, psplib, CuSP	cumulative, disjunctive	java	choco, CHIP			benchmark, http://, https://	edge finder, edge finding, not first, not last, energetic reasoning, time tabling, sweep
KameugneFSN11 [194]	scheduling, order, job, task, resource, precedence, preempt, make span, completion time, job shop, release date	RCPSP, psplib, CuSP	cumulative, disjunctive		gecode			benchmark, http://	edge finding, not first, not last, time tabling
KameugneFSN14 [195]	scheduling, order, job, task, resource, precedence, preempt, make span, completion time, job shop, release date	RCPSP, psplib, CuSP	cumulative, dis- junctive		gecode, CHIP			benchmark, ran- dom instance, http://	edge finder, edge finding, not first, not last, energetic reasoning, time tabling
KanetAG04 [196]									
KelarevaTK13 [197]	scheduling, order, task, activity, resource, precedence, transportation, inventory, make span, tardiness, setup time, re scheduling, lazy clause generation	LSFRP, BPC- TOP, Bulk Port Cargo Throughput Optimisation Problem, Liner Shipping Fleet Repositioning Problem	alldifferent		cplex, mini zinc			real world, http://	
KelbelH11 [198]	scheduling, order, job, task, resource, machine, precedence, preempt, inventory, make span, completion time, tardiness, earli- ness, job shop, release date, due date, distributed	JSSP	cumulative, disjunctive		cplex, OPL, ilog solver			benchmark, generated instance, ran- dom instance, http://	edge finder, edge finding
KeriK07 [199]	scheduling, order, job, activity, resource, precedence, make span, cmax, tardiness, earliness, job shop, due date, temporal con- straint reasoning	RCPSP		C++				http://	edge finding

Table 5: Keywords by Work and Domains										
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm	
KhayatLR06 [200]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, make span, cmax, job shop, due date, setup time				cplex, OPL			benchmark, real life, http://		
KhemmoudjPB06 [201]	scheduling, order, resource, stock level, distributed		cumulative	C++	CHIP			real world		
KimCMLLP23 [202]	scheduling, order, job, ma- chine, precedence, transporta- tion, make span, tardiness, ear- liness, job shop, open shop, due date, setup time, distributed	parallel machine, SCC	nooverlap	python	gurobi, or tools		steel industry	benchmark, real world, https://, zenodo		
KlankeBYE21 [203]	scheduling, order, job, task, activity, resource, machine, make span, completion time, job shop, due date, producer consumer, re scheduling, batch process		cumulative, dis- junctive, circuit, nooverlap	python	cplex, gurobi, or tools, CHIP		food processing industry	benchmark, random in- stance, real life, https://		
KletzanderM17 [204]	scheduling, order, resource, machine, transportation	parallel machine					steel industry	http://		
KoehlerBFFHPSSS21 [205	scheduling, order, job, task, resource, machine, precedence, make span, flow time, lateness, tardiness, flow shop, job shop	single machine, CTW	all different, cumulative, disjunctive, circuit	python, c	cplex, gurobi, or tools, OPL, Z3, chuffed, mini zinc			benchmark, real world, http://, https://, github		
KorbaaYG00 [207]	1,3									
KorbaaYG99 [206]	scheduling, order, job, task, resource, machine, transportation, make span, flow shop, job shop		circuit	prolog	CHIP, OZ, ilog solver					
KoschB14 [208]	scheduling, order, job, resource, machine, make span, cmax, com- pletion time, lateness, job shop, release date, due date, dis- tributed, multi agent, batch pro- cess	RCPSP, single machine	cumulative, disjunctive, bin packing	java	cplex, choco			benchmark		
KovacsB08 [209]	scheduling, order, job, activity, resource, machine, preempt, completion time, tardiness, release date	single machine	cumulative, disjunctive, bin packing		ilog solver, ilog scheduler			benchmark	sweep	
KovacsB11 [210]	scheduling, order, job, activity, resource, machine, precedence, preempt, make span, completion time, flow time, tardiness, earli- ness, flow shop, job shop, release date, due date, distributed	single machine, parallel machine	cumulative, disjunctive	C++	ilog solver, ilog scheduler			benchmark	edge finding	
KovacsEKV05 [211]	scheduling, job, resource, precedence, job shop, setup time							real life		
KovacsK11 [212]	scheduling, order, job, task, resource, machine, sequence dependent setup, transportation, completion time, tardiness, earliness, flow shop, job shop, release date, due date	single machine		C++	cplex, gecode, ilog solver			http://		

			Table 5: Key	words by Work and	Domains				
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
KovacsTKSG21 [215]	scheduling, order, job, task, resource, machine, precedence, preempt, inventory, tardiness, flow shop, job shop, release date, due date, distributed, re schedul- ing	RCPSP, single machine	cumulative		cplex, gurobi, or tools			benchmark, real world, supple- mentary ma- terial, http://, https://, github	
KovacsV04 [213]	scheduling, order, job, task, resource, machine, precedence, make span, job shop	single machine	cumulative, disjunctive		ilog scheduler			benchmark, real life, industrial partner, http://	edge finding
KovacsV06 [214]	scheduling, order, job, task, resource, machine, precedence, make span, tardiness, earliness, job shop, setup time	RCPSP, single machine	cumulative		ilog scheduler			benchmark, generated instance, indus- trial partner	
KreterSS15 [216]	scheduling, order, task, activity, resource, machine, preempt, make span, completion time, lazy clause generation	RCPSP, parallel machine	cumulative, diffn		cplex, CHIP, chuffed, mini zinc			benchmark, http://	
KreterSS17 [217]	scheduling, order, task, activity, resource, machine, precedence, preempt, make span, completion time, lazy clause generation	RCPSP, parallel machine	cumulative, diffn, alwaysin		cplex, CHIP, cpo, chuffed, mini zinc			benchmark, http://	edge finding
KrogtLPHJ07 [372]	scheduling, order, job, activity, resource, machine, precedence, inventory, job shop, due date		circuit	prolog	OPL			real world	
KuchcinskiW03 [218]	scheduling, order, resource, precedence, distributed		circuit	java				benchmark	
Kumar03 [219]	scheduling, order, activity, resource, producer consumer								bi partite matching, maxi- mum matching, max flow
Laborie09 [220]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, sequence dependent setup, inventory, tardiness, earliness, job shop, release date, due date, setup time		alternative constraint, cumulative, disjunctive, nooverlap, endbeforestart	c	OPL, cpo			benchmark, real world, http://	
Laborie18a [221]	scheduling, job, task, resource, machine, precedence, release date, due date		alternative constraint, cumulative		OPL, cpo, ilog scheduler			benchmark, real world, real life, http://, https://	energetic rea- soning
LaborieRSV18 [222]	scheduling, order, job, task, activity, resource, machine, precedence, sequence dependent setup, transportation, inventory, make span, tardiness, earliness, flow shop, job shop, release date, due date, setup time, manpower, distributed, re scheduling, batch process	RCPSP, psplib, parallel machine	alternative constraint, cumulative, disjunctive, nooverlap, end- beforestart, alwaysin, span constraint	java , python, C++ , c	cplex, gecode, choco, OPL, CHIP, cpo, ilog solver, ilog scheduler		chemical indus- try, petro chem- ical industry	benchmark, real world, http://, https://	edge finding

			Table 5: Key	words by Work and	Domains				
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
LacknerMMWW21 [223]	scheduling, order, job, task, machine, make span, lateness, tardiness, earliness, flow shop, release date, due date, setup time, batch process	single ma- chine, parallel machine, OSP	cumulative, nooverlap, endbeforestart		cplex, gurobi, or tools, OPL, cpo, chuffed, mini zinc		electronics industry, man- ufacturing industry, steel industry	benchmark, instance gener- ator, random instance, real life, indus- trial partner, supplemen- tary material, https://	
LacknerMMWW23 [224]	scheduling, order, job, task, machine, make span, lateness, tardiness, earliness, job shop, release date, due date, setup time, batch process	single ma- chine, parallel machine, OSP	alternative constraint, cumulative, disjunctive, nooverlap, end- beforestart, bin packing		cplex, gurobi, or tools, OPL, cpo, chuffed, mini zinc		electronics industry, man- ufacturing industry, steel industry	benchmark, instance genera- tor, random in- stance, real life, industrial part- ner, http://, https://, zen- odo	time tabling
LahimerLH11 [225]	scheduling, order, job, task, resource, machine, precedence, preempt, make span, cmax, completion time	RCPSP, parallel machine	disjunctive	C++	ilog scheduler			benchmark, http://	energetic reasoning
LauLN08 [226]	scheduling, order, job, resource, machine, transportation, inven- tory, flow shop, job shop, dis- tributed							benchmark, real world	
Layfield02 [227]									
LetortBC12 [228]	scheduling, order, task, resource, machine, precedence, make span	psplib	cumulative, bin packing	java , prolog	choco, CHIP, sicstus			benchmark, ran- dom instance, http://	edge finding, sweep
LetortCB13 [229]	scheduling, order, task, resource, machine, precedence, make span	RCPSP, psplib	cumulative, disjunctive, bin packing	java , prolog	choco, sicstus			benchmark, ran- dom instance, http://	edge finding, energetic rea- soning, sweep
LetortCB15 [230]	scheduling, order, job, task, resource, machine, precedence, make span	psplib	cumulative, bin packing	java , prolog	choco, CHIP, sicstus			benchmark, generated instance, ran- dom instance, http://	edge finding, sweep
LiFJZLL22 [231]	scheduling, order, job, task, machine, transportation, make span, completion time, flow time, tardiness, flow shop, job shop, setup time, buffer capacity, dis- tributed, batch process	single machine			OPL			benchmark	
LiessM08 [232]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, make span, cmax, job shop	RCPSP, psplib	cumulative, dis- junctive	C++				benchmark, http://	edge finding
LimBTBB15 [235]	scheduling, order, job, machine, tardiness, earliness, job shop, multi agent, re scheduling							benchmark, http://	time tabling
LimHTB16 [234]	scheduling, order, activity, machine, distributed, multi agent, re scheduling		cumulative					real world, http://	
LimRX04 [233]	scheduling, order, job, machine, preempt, transportation, com- pletion time							generated in- stance	

Table 5: Keywords by Work and Domains											
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm		
Limtanyakul07 [236]	scheduling, order, job, task, resource, machine, precedence, make span, release date, due date		cumulative		OPL			real life	energetic reasoning		
LimtanyakulS12 [237]	scheduling, order, job, activity, resource, machine, precedence, completion time, tardiness, re- lease date, due date		cumulative, dis- junctive, table constraint, bin packing		cplex, ilog scheduler		automotive industry	benchmark, generated in- stance, random instance, real life, industrial partner, http://	edge finding, not first, not last, energetic reasoning		
LiuCGM17 [239]	scheduling, order, task, activity, machine, transportation, cmax			python	or tools, mini		tourism indus- try	http://, https://, github			
LiuJ06 [240]	scheduling, order, task, resource, make span		disjunctive				J. J.				
LiuLH19 [238]	scheduling, order, resource				choco			benchmark, https://	time tabling		
LombardiBM15 [241]	scheduling, order, job, task, activity, resource, machine, precedence, make span, completion time, job shop, distributed	RCPSP, psplib, JSSP						benchmark, real world			
LombardiBMB11 [242]	scheduling, order, task, activity, resource, machine, precedence, make span, completion time	RCPSP	cumulative	C++				benchmark, industrial in- stance, real life			
LombardiM09 [243]	scheduling, order, task, activity, resource, precedence, preempt, make span, completion time	RCPSP			ilog solver			instance genera- tor, real world			
LombardiM10 [244]	scheduling, order, task, activity, resource, precedence, make span, completion time	RCPSP	cumulative, dis- junctive		ilog solver			benchmark, real world			
LombardiM12 [245]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, sequence dependent setup, transportation, inventory, make span, completion time, tardiness, earliness, flow shop, job shop, due date, setup time, manpower, distributed, rescheduling, lazy clause generation	RCPSP, psplib, parallel machine	cumulative, dis- junctive, circuit		or tools		chemical indus- try	benchmark, real world	edge finding, energetic rea- soning		
LopesCSM10 [246]	scheduling, order, job, task, activity, resource, precedence, transportation, inventory, stock level, make span, job shop, due date, distributed, re scheduling		all different, disjunctive, table constraint	C++	ilog solver, ilog scheduler		oil industry	benchmark, real world, http://	max flow		
LopezAKYG00 [247] LorigeonBB02 [248]											
Lunardi20 [250] LunardiBLRV20 [249]	scheduling, order, job, activity, resource, machine, precedence, preempt, make span, completion time, tardiness, flow shop, job shop, due date, setup time, rescheduling	FJS	nooverlap, end- beforestart	python	cplex			benchmark, generated instance, ran- dom instance, https://, github			

Table 5: Keywords by Work and Domains											
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm		
Madi-WambaB16 [251]	scheduling, order, job, task, resource, precedence		cumulative	java	choco, CHIP			benchmark, generated in- stance, random instance, real world, http://, https://			
Madi- WambaLOBM17 [252]	scheduling, order, job, task, activity, resource, machine, precedence, distributed, re scheduling		cumulative, bin packing	prolog	sicstus			real world	sweep		
MakMS10 [253]	scheduling, order, job, task, activity, resource, machine, precedence, transportation, inventory, due date										
MalapertN19 [254]	scheduling, order, job, task, resource, machine, sequence dependent setup, make span, cmax, completion time, flow time, setup time	single machine, parallel ma- chine, PMSP, PTC	alternative con- straint, cumula- tive, nooverlap, alwaysin		cplex, cpo			benchmark, generated instance, in- dustrial in- stance, http://, https://			
Malik08 [255]								- //			
MalikMB08 [256] MaraveliasG04 [257]					OZ						
MartinPY01 [258]	scheduling, order, task, resource, machine, transportation, rescheduling		circuit	prolog	eclipse, ilog solver			real life			
Mason01 [259]	scheduling, order, task, activity, transportation				cplex			http://			
Mehdizadeh- Somarin23 [260]	scheduling, order, job, task, machine, precedence, preempt, make span, cmax, completion time, tardiness, flow shop, job shop, setup time, multi agent, rescheduling	single ma- chine, parallel machine, JSSP		python	cplex			random instance, https://			
MelgarejoLS15 [6]	scheduling, order, job, task, resource, machine, precedence, transportation, tardiness, setup time	single machine	all different, dis- junctive, table constraint, cir- cuit, nooverlap		cplex			benchmark, real world, http://			
Menana11 [261]			, ,								
MengZRZL20 [262]	scheduling, order, job, task, resource, machine, precedence, preempt, no preempt, sequence dependent setup, transportation, make span, cmax, completion time, flow time, tardiness, earliness, flow shop, job shop, open shop, setup time, distributed, batch process	parallel ma- chine, OSP, FJS, Open Shop Scheduling Problem	alternative constraint, nooverlap, endbeforestart		cplex, gurobi, gecode, or tools, OPL			benchmark, supplemen- tary material, https://			
Mercier- AubinGQ20 [263]  MokhtarzadehTNF20 [264	scheduling, order, job, task, activity, resource, machine, precedence, preempt, sequence dependent setup, make span, completion time, tardiness, earliness, job shop, due date, setup time, lazy clause generation	RCPSP	cumulative, dis- junctive, circuit	python, C++	mini zinc		manufacturing industry, textile industry	industrial instance, in- dustrial part- ner, http://, https://			

Table 5: Keywords by Work and Domains										
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm	
MonetteDD07 [265]	scheduling, order, job, task, resource, machine, precedence, preempt, no preempt, make span, completion time, job shop, open shop	OSP, Open Shop Schedul- ing Problem	disjunctive		gecode			benchmark	edge finding, not first, not last	
MonetteDH09 [266]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, make span, completion time, tardiness, earliness, job shop, release date, due date, distributed		cumulative, dis- junctive					benchmark	not last	
MontemanniD23 [268]	scheduling, order, task, resource, machine, distributed		circuit	python	gurobi, or tools			benchmark, supplemen- tary material, https://		
MontemanniD23a [267]	scheduling, order, task, transportation, completion time		circuit	python	or tools			benchmark, http://, https://		
MossigeGSMC17 [269]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, make span, completion time, job shop, distributed	RCPSP, single machine, FJS	cumulative, dis- junctive	prolog	CHIP, sicstus			benchmark, generated in- stance, random instance, real world, indus- trial partner, http://		
MouraSCL08 [271]	scheduling, order, activity, re- source, precedence, preempt, transportation, inventory, dis- tributed		disjunctive, ta- ble constraint	C++	ilog solver, ilog scheduler			. //	max flow	
MouraSCL08a [270]	scheduling, order, resource, transportation, inventory, due date, distributed, re scheduling		cumulative, dis- junctive	C++	ilog solver, ilog scheduler			benchmark, real world		
MullerMKP22 [272]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, make span, cmax, completion time, job shop, due date, setup time, batch process	FJS	disjunctive, circuit	java , python	cplex, gecode, choco, or tools, OPL, chuffed, mini zinc			benchmark, random in- stance, real world, https://, github		
MurinR19 [273]	scheduling, order, job, task, activity, resource, machine, precedence, transportation, make span, completion time, job shop, setup time	JSPT	alternative constraint, nooverlap, endbeforestart		cplex, OPL			benchmark, real life, https://, github		
MurphyMB15 [274] Muscettola02 [275]	scheduling, order, task, activity, resource, machine, re scheduling scheduling, order, job, activity, resource, precedence, cmax, job		cumulative, dis- junctive, circuit	java	choco			real world, http:// http://	max flow, edge finding	
NattafAL15 [276]	shop scheduling, order, task, activity, resource, preempt, make span, release date, due date	RCPSP, CECSP, CuSP	cumulative	C++	cplex			generated instance, http://	energetic reasoning, sweep	
NattafAL17 [277]	scheduling, order, job, task, activity, resource, make span, release date	CECSP	cumulative, dis- junctive	C++	cplex			real world, http://	edge finding, energetic rea- soning	

Table 5: Keywords by Work and Domains											
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm		
NattafM20 [278]	scheduling, order, job, resource, machine, make span, completion time, flow time, setup time	single machine, parallel ma- chine, PMSP, PTC	cumulative, nooverlap		cplex, cpo			benchmark, industrial in- stance, http://, https://			
NishikawaSTT18 [280]	scheduling, order, task, activity, resource, precedence, make span, distributed		alternative con- straint, endbe- forestart		cplex			benchmark, real world, https://			
NishikawaSTT18a [281]	scheduling, order, task, activity, resource, precedence, make span, distributed, re scheduling		alternative con- straint, endbe- forestart		cplex			benchmark, real world, real life, https://			
NishikawaSTT19 [282]	,							1 //			
NovaraNH16 [283]	scheduling, order, job, task, activity, resource, machine, precedence, sequence dependent setup, make span, completion time, tardiness, earliness, due date, setup time, manpower, re scheduling, batch process		alternative constraint, cumulative, disjunctive, nooverlap, endbeforestart		cplex, OPL		pharmaceutical industry	benchmark, http://			
Novas19 [284]	scheduling, order, job, task, activity, resource, machine, precedence, sequence dependent setup, transportation, inventory, make span, cmax, completion time, flow time, lateness, tardiness, flow shop, job shop, release date, due date, setup time, distributed	parallel ma- chine, FJS	cumulative, nooverlap, endbeforestart		cplex, OPL			benchmark, https://			
NovasH10 [285]	scheduling, order, job, task, activity, resource, machine, precedence, make span, completion time, lateness, tardiness, earliness, due date, setup time, manpower, re scheduling, batch process				OPL, ilog scheduler	d-		http://			
NovasH12 [286]	scheduling, order, job, task, activity, resource, machine, precedence, transportation, make span, completion time				OPL, ild solver, ild scheduler						
NovasH14 [287]	scheduling, order, job, task, activity, resource, machine, precedence, transportation, make span, completion time, job shop, buffer capacity	single machine, parallel machine			OPL, ild solver, ild scheduler			benchmark, http://			
OddiPCC03 [288]	scheduling, order, task, activity, resource, machine, precedence, preempt, completion time, dis- tributed	single machine		java				benchmark, http://			
OuelletQ13 [289]	scheduling, order, task, resource, precedence, preempt, make span, completion time	RCPSP, psplib, CuSP	cumulative, dis- junctive		choco			benchmark, http://	edge finder edge findin not first, nelast, energet reasoning, tin tabling, sweep		

	Table 5: Keywords by Work and Domains											
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm			
OuelletQ18 [290]	scheduling, order, task, resource, precedence, make span, completion time	RCPSP, psplib	cumulative, disjunctive	java	choco			benchmark, https://	edge finding, not first, not last, energetic reasoning, time tabling			
OuelletQ22 [291]	scheduling, order, task, activity, resource, preempt, completion time, lazy clause generation		cumulative, dis- junctive	java	choco, mini zinc			benchmark, random instance, https://, github	edge finding, not first, not last, energetic reasoning, time tabling, sweep			
OujanaAYB22 [292]	scheduling, order, job, task, resource, machine, precedence, preempt, sequence dependent setup, make to order, make span, completion time, tardiness, flow shop, job shop, open shop, due date, setup time, buffer capacity, distributed, batch process	parallel machine, PMSP, HFF, FJS	disjunctive, nooverlap, span constraint		ОРЬ, сро		food industry, steel industry	benchmark, industrial in- stance, real world, real life, https://	<i>J.</i>			
OzturkTHO13 [293]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, make span, cmax, completion time, flow shop, setup time	SBSFMMAL	cumulative, dis- junctive		cplex, OPL, CHIP, ilog solver			real world, real life, http://	edge finding			
PandeyS21a [294]	scheduling, order, job, task, activity, resource, machine, precedence, make span, completion time, flow shop, distributed, rescheduling	single ma- chine, parallel machine, PMSP	alternative constraint, cumulative, endbeforestart		cplex, OPL			benchmark, https://				
PapaB98 [296]	scheduling, order, job, task, activity, resource, machine, preempt, make span, cmax, completion time, flow shop, job shop, due date, setup time, distributed, re scheduling	JSSP, PJSSP	cumulative, dis- junctive, table constraint	C++	CHIP, claire, ilog solver			benchmark, http://	edge finder, edge finding, energetic rea- soning			
PapeB97 [295]												
ParkUJR19 [297]	scheduling, order, job, task, resource, machine, preempt, no preempt, make span, cmax, completion time, flow time, lateness, tardiness, flow shop, job shop, open shop, due date, distributed	single machine, parallel machine	nooverlap, end- beforestart					real world, https://				
PembertonG98 [298]												
PerezGSL23 [299]	scheduling, order, task, activity, resource, machine, transporta- tion, inventory, make span, com- pletion time, re scheduling		cumulative, ta- ble constraint					generated instance, real world				
PesantRR15 [301]	scheduling, order, activity, trans- portation, lazy clause generation		cumulative, ta- ble constraint		gurobi, gecode, ilog solver			http://				
PoderB08 [303]					9							
PoderBS04 [304]	scheduling, order, task, activity, resource, machine, precedence, preempt, release date, due date, producer consumer	RCPSP	$\operatorname{cumulative}$	prolog	СНІР		chemical indus- try	http://				

Table 5: Keywords by Work and Domains										
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm	
PohlAK22 [305]	scheduling, order, job, activity, resource, machine, precedence, sequence dependent setup, transportation, inventory, completion time, lateness, tardiness, earliness, release date, setup time, rescheduling	single machine, SCC	cumulative, nooverlap	python	cplex, gurobi			benchmark, real world, http://, https://		
Polo-MejiaALB20 [306]	benedaming									
PopovicCGNC22 [307]	scheduling, order, task, activity, resource, machine, transporta- tion, make span, completion time	TMS	cumulative, nooverlap, alwaysin	C++ , prolog	cplex, CHIP, sicstus		electricity in- dustry	https://		
PourDERB18 [308]	scheduling, order, job, task, machine, transportation				cplex, or tools			benchmark, generated in- stance, real world, real life, http://		
PovedaAA23 [309]	scheduling, order, job, task, activity, resource, precedence, preempt, make span, job shop, release date, lazy clause generation	RCPSP	cumulative, disjunctive	python	cplex, cpo, chuffed, mini zinc			benchmark, industrial in- stance, real world, real life, https://, github		
Pralet17 [310]	scheduling, order, job, activity, resource, machine, precedence, sequence dependent setup, make span, job shop, due date, setup time	RCPSP, psplib, JSSP	cumulative, disjunctive		cplex, CHIP, cpo			benchmark, http://		
PraletLJ15 [311]	scheduling, order, job, task, activity, resource, precedence, make span, tardiness, job shop, due date	JSSP	alternative constraint, noover- lap		cplex, cpo					
PrataAN23 [312]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, sequence dependent setup, inventory, make span, completion time, flow time, lateness, tardiness, earliness, flow shop, job shop, open shop, release date, due date, setup time, distributed, rescheduling, batch process	single ma- chine, parallel machine, Open Shop Scheduling Problem	cumulative, cir- cuit		СНІР		manufacturing industry	benchmark, real world, real life, http://, https://	time tabling	
Puget95 [313]	scheduling, order, job, task, activity, resource, transportation, job shop, manpower		disjunctive					benchmark		
QinDCS20 [315]	scheduling, order, job, task, activity, resource, machine, precedence, transportation, make span, cmax, completion time, tardiness, setup time	parallel machine	nooverlap, end- beforestart		cplex, OPL			benchmark, real life, https://		
QinWSLS21 [314]	scheduling, order, job, machine, preempt, make span, cmax, com- pletion time, lateness, tardiness, flow shop, job shop, batch pro- cess	single machine		C++	cplex			https://		
QuSN06 [316]	scheduling, task, resource, precedence, distributed		circuit	prolog	sicstus					

Table 5: Keywords by Work and Domains										
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm	
QuirogaZH05 [317]	scheduling, order, task, activity, resource, machine, precedence, inventory, make span, completion time, flow time, tardiness, earliness, flow shop, release date, due date				OPL, eclipse, ilog solver, ilog scheduler					
RendlPHPR12 [318]	scheduling, order, job, machine, transportation, re scheduling			java				benchmark, real world, http://		
RiahiNS018 [319]										
RodosekW98 [320]	scheduling, order, job, task, activity, resource, machine, transportation, make span		disjunctive, cir- cuit	prolog	cplex, OPL, CHIP, eclipse			benchmark		
RossiTHP07 [321]	scheduling, order, resource, inventory, stock level, distributed		cumulative		choco, OPL					
SacramentoSP20 [322]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, transportation, make span, completion time, flow shop, job shop, open shop, distributed	parallel ma- chine, Open Shop Schedul- ing Problem	alternative constraint, cumulative, disjunctive, nooverlap, endbeforestart	java	cplex, cpo			benchmark, real world, real life, https://, zenodo		
Sadykov04 [323]	scheduling, job, task, machine, precedence, preempt, completion time, lateness, release date, due date	single machine, parallel machine	disjunctive						edge finding	
SadykovW06 [324]										
SakkoutW00 [325]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, transportation, job shop, distributed, re scheduling	single machine, KRFP	disjunctive, bin packing		cplex, CHIP			benchmark, real world, http://	edge finder edge finding	
SchausHMCMD11 [326]	order, task	SCC	bin packing				steel industry	benchmark, generated in- stance, http://		
SchildW00 [327]	scheduling, order, job, task, resource, machine, precedence, completion time, flow shop, job shop, distributed	single machine	disjunctive, bin packing		ilog solver		aerospace industry, automotive industry	http://	edge finding time tabling	
SchuttCSW12 [328]	scheduling, order, activity, re- source, precedence, preempt, make span, lazy clause genera- tion		cumulative		СНІР			benchmark, http://		
SchuttFS13 [330]	scheduling, order, job, task, activity, resource, machine, precedence, make span, completion time, job shop, lazy clause generation	RCPSP, FJS	alternative constraint, cumulative, dis- junctive, span constraint		mini zinc			benchmark, http://	energetic rea soning, tim tabling	
SchuttFSW09 [331]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, make span, open shop, lazy clause generation	psplib	cumulative, dis- junctive		CHIP, sicstus, eclipse			benchmark, real world, http://	edge finder	
SchuttFSW11 [332]	scheduling, order, task, activity, resource, machine, precedence, preempt, make span, completion time, open shop, lazy clause gen- eration	RCPSP, psplib	cumulative, dis- junctive, circuit, span constraint		CHIP, sicstus, eclipse, ilog scheduler			benchmark, real world, http://	edge finder edge finding not first, no last	

Table 5: Keywords by Work and Domains										
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm	
SchuttS16 [333]	scheduling, order, activity, re- source, machine, precedence, preempt, inventory, make span, manpower, producer consumer, lazy clause generation	RCPSP	cumulative		chuffed, ilog scheduler, mini zinc			benchmark, http://		
SchuttW10 [334]	scheduling, order, task, activity, resource, preempt, make span, release date, due date, lazy clause generation	RCPSP, psplib, CuSP	cumulative, dis- junctive	java	CHIP			benchmark	edge finding, not first, not last	
SerraNM12 [335]	scheduling, order, activity, resource, machine, precedence, preempt, inventory, release date		cumulative, al- waysin		cplex, OPL			benchmark, real world, http://		
ShaikhK23 [336]										
ShiYXQ22 [337] ShinBBHO18 [338]	scheduling, order, job, task, activity, resource, machine, preempt, transportation, inventory							real world, http://, https://, github		
Siala15 [339]	scheduling, resource		disjunctive					benchmark, http://		
SialaAH15 [340]	scheduling, order, job, task, resource, machine, precedence, make span, cmax, tardiness, ear- liness, job shop, open shop, setup time, lazy clause generation	RCPSP, JSSP	cumulative, disjunctive		mistral			benchmark, http://, github	edge finding	
SimoninAHL12 [341]	scheduling, order, task, activity, resource, precedence, preempt		cumulative, dis- junctive, span constraint		CHIP				sweep	
SimoninAHL15 [342]	scheduling, order, task, activity, resource, precedence, preempt, transportation, inventory, make span		cumulative, dis- junctive, span constraint		CHIP				sweep	
Simonis07 [344]	scheduling, order, job, task, activity, resource, machine, sequence dependent setup, transportation, bill of material, job shop, release date, due date, setup time, producer consumer, re scheduling, batch process		alldifferent, cumulative, dis- junctive, diffn, bin packing	prolog	CHIP, ilog scheduler				bi partite matching, time tabling, sweep	
Simonis95 [343]	scheduling, order, task, resource, machine, precedence, transportation, producer consumer		cumulative, diffn, circuit	prolog	СНІР		food industry			
SimonisC95 [345]	scheduling, order, job, task, resource, machine, transportation, inventory, stock level, flow shop, job shop, due date, manpower, producer consumer, batch process, continuous process		$\begin{array}{c} \text{cumulative,} \\ \text{diffn} \end{array}$	prolog	СНІР		food industry	real life		
SquillaciPR23 [346]	scheduling, order, task, activity, resource, distributed, multi agent	OSP, EOSP, Earth Observa- tion Scheduling Problem	nooverlap	python	cplex			benchmark, https://, github		

Table 5: Keywords by Work and Domains											
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm		
SubulanC22 [347]	scheduling, order, task, activity, resource, machine, precedence, preempt, transportation, inven- tory, BOM, make span, comple- tion time, tardiness, due date	RCPSP	cumulative, endbeforestart		cplex, OPL			benchmark, real world, real life, https://			
SunLYL10 [349]	scheduling, order, task, dis- tributed				cplex, OPL			http://, https://			
SureshMOK06 [350]								- //			
SzerediS16 [351]	scheduling, order, task, activity, resource, machine, precedence, preempt, make span, lazy clause generation	RCPSP, psplib	cumulative		cplex, gecode, chuffed, mini zinc			benchmark, http://			
TangB20 [352] TangLWSK18 [353]	scheduling, order, job, resource, machine, precedence, make span, tardiness, flow shop, due date, batch process	single machine, 2BPHFSP	endbeforestart, alwaysin, span constraint, bin packing	java	cplex, cpo		manufacturing industry	real world, https://			
TardivoDFMP23 [354]	scheduling, order, task, activity, resource, precedence, preempt, make span, lazy clause genera- tion	RCPSP, psplib, CuSP	cumulative, disjunctive	C++	gecode, CHIP, mini zinc			benchmark, real world, https://, github, bit- bucket	edge finding, not first, not last, energetic reasoning, time tabling, sweep		
TasselGS23 [355]	scheduling, order, job, task, resource, machine, precedence, preempt, make span, completion time, flow time, tardiness, flow shop, job shop, re scheduling	JSSP	cumulative, disjunctive, nooverlap	java	choco			benchmark, industrial in- stance, real world, supple- mentary mate- rial, https://, github	<b>3</b> ) <b>1</b>		
Tay92 [357]								0			
Teppan22 [358] Tesch16 [359]	scheduling, order, job, resource, precedence, make span, completion time	RCPSP, psplib, CuSP	cumulative, disjunctive	C++				http://	edge finding, not first, not last, energetic reasoning, time tabling, sweep		
Tesch18 [360]	scheduling, order, job, task, resource, machine, precedence, preempt, make span, completion time, lateness, release date, due date	RCPSP, psplib, single machine, CuSP	$\operatorname{cumulative}$					https://	edge finding, not last, ener- getic reasoning, time tabling, sweep		
ThiruvadyBME09 [361]	scheduling, order, job, resource, machine, make span, tardiness, open shop, due date, setup time	single machine	cumulative	C++	gecode			http://	•		
Timpe02 [362]	scheduling, order, job, task, activity, resource, machine, inventory, stock level, make span, due date, setup time, producer consumer		cumulative, dis- junctive, diffn	C++	cplex, CHIP		chemical indus- try, process in- dustry	http://			
Tom19 [363]	scheduling, job, task, activity, resource, machine, transporta- tion, make span, tardiness, job shop, re scheduling	single machine		java				real world			
TopalogluO11 [364]	scheduling, order, task, preempt, transportation, distributed, re scheduling				cplex, OPL, ilog solver			real life, http://	time tabling		

gorithm ne tabling ge finder
ge finder
ge finder
ge finder
ge finder
ze finding
ge finding
ge finding
ge finding, t last
ge finding, t last, sweep
t last
ge finding, t first, not et, energetic asoning
ge finding, t last, ener- tic reasoning, ne tabling, eep
ge finding, t first, not
ge finding, t first, not t, sweep
ne tabling
gt t gt tine gt t

Table 5: Keywords by Work and Domains										
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm	
VlkHT21 [387]	scheduling, order, resource, precedence, completion time, tardiness, due date, distributed	PMSP	alternative constraint, noover- lap		cplex, gurobi, Z3			benchmark, random instance, industrial partner, http://, https://, github		
Wallace96 [388]	scheduling, order, job, task, activity, resource, machine, transportation, job shop, distributed, multi agent		disjunctive, circuit	prolog, lisp	OPL, CHIP, eclipse, ilog solver		automotive in- dustry, process industry	http://	time tabling	
WallaceY20 [389]	scheduling, order, job, task, resource, machine, transportation, flow shop, job shop, lazy clause generation	CHSP	cumulative, dis- junctive, circuit		cplex, gurobi, gecode, chuffed, mini zinc			benchmark, random instance, real world, real life, http://, https://	edge finding, time tabling	
WangB20 [390]	scheduling, order, job, task, resource, machine, distributed	FJS, Fixed Job Scheduling	alldifferent		gurobi			http://, https://, github		
WangB23 [391]	scheduling, order, job, task, resource, transportation, lazy clause generation	FJS, Fixed Job Scheduling	alldifferent		gurobi			random instance, real world, http://		
WangMD15 [392]	scheduling, order, job, task, activity, resource, precedence, make span, cmax, completion time, job shop, re scheduling		cumulative, nooverlap		cplex			real world, real life, http://, https://	time tabling	
WatsonB08 [393]	scheduling, order, job, resource, machine, make span, cmax, com- pletion time, job shop		disjunctive	C++	ilog scheduler			benchmark, real world		
WessenCS20 [394]	scheduling, order, job, task, precedence, make span, comple- tion time, job shop, multi agent		circuit		gecode			real world, http://, https://		
WikarekS19 [395]	scheduling, order, job, task, resource, machine, precedence, preempt, inventory, make span, cmax, flow shop, job shop, setup time, manpower, distributed, multi agent	RCPSP, JSSP	cumulative, dis- junctive		eclipse					
WinterMMW22 [396]	scheduling, order, job, task, resource, machine, precedence, completion time, tardiness, re- lease date, due date, setup time, distributed	parallel ma- chine, PMSP	alternative con- straint, noover- lap		cplex, gurobi, cpo		agricultural industry, man- ufacturing industry	benchmark, real life, industrial partner, indus- try partner, supplemen- tary material, https://, zenodo		
Wolf03 [397]	scheduling, order, job, task, activity, resource, machine, preempt, make span, completion time, job shop		cumulative, disjunctive	java				benchmark	edge finding, not first, not last, sweep	
WolfS05 [398]	scheduling, order, task, activity, resource, preempt, completion time, distributed		cumulative		CHIP			real world	not last, energetic reasoning, sweep	
WolinskiKG04 [399]	scheduling, order, resource, machine, precedence, distributed	SCC		java						
WuBB05 [401]	scheduling, job, resource, make span, release date				ilog scheduler			benchmark		

	Table 5: Keywords by Work and Domains										
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm		
YangSS19 [402]	scheduling, order, task, activity, resource, machine, preempt, completion time, lazy clause generation		cumulative, dis- junctive	prolog	gecode, choco, or tools, CHIP, sicstus			generated instance, https://	edge finding, not last, ener- getic reasoning		
YoungFS17 [403]	scheduling, order, task, activity, resource, machine, precedence, preempt, make span, lazy clause generation	RCPSP, psplib	cumulative, dis- junctive		chuffed, mini zinc			benchmark, instance gener- ator, http://, https://, github	time tabling		
YunusogluY22 [404] YuraszeckMC23 [405]	scheduling, order, job, machine, precedence, preempt, make span, cmax, flow time, job shop, open shop, release date, due date, distributed	JSSP, OSSP	nooverlap					benchmark, http://, https://, github			
YuraszeckMCCR23 [406]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, make span, cmax, flow time, flow shop, job shop, open shop, setup time, batch process	RCPSP, JSSP, OSSP, FJS, Open Shop Scheduling Problem	cumulative, endbeforestart		cplex, OPL		pharmaceutical industry	benchmark, real world, https://, github			
ZarandiKS16 [407]	scheduling, order, job, task, resource, machine, preempt, transportation, make span, completion time, tardiness, earliness, flow shop, job shop, due date, distributed	single machine			ilog solver			real world	time tabling		
ZeballosH05 [408]	scheduling, order, job, task, activity, resource, machine, precedence, transportation, make span, completion time, tardiness, due date, buffer capacity				OPL, ilog solver, ilog scheduler			http://			
ZeballosQH10 [409]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, transportation, make span, cmax, completion time, tardiness, earliness, job shop, due date				cplex, OPL, eclipse, ilog solver, ilog scheduler			benchmark, real world, http://			
ZhangJZL22 [410]	scheduling, order, job, task, resource, machine, precedence, transportation, make span, com- pletion time, tardiness, flow shop, due date, setup time	single machine, parallel machine	alternative constraint, cumulative, nooverlap, endbeforestart					benchmark			
ZhangLS12 [413] ZhangW18 [412]	scheduling, order, cmax scheduling, order, job, resource, machine, precedence, preempt, transportation, make span, com- pletion time, flow time, late- ness, tardiness, earliness, flow shop, job shop, setup time, dis- tributed, multi agent, re schedul- ing	FJS	cumulative, nooverlap		cplex, OPL, Z3			benchmark, http://	time tabling		

	Table 5: Keywords by Work and Domains								
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
ZhangYW21 [411]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, make span, cmax, job shop, release date, setup time, distributed, multiagent, re scheduling, batch process	RCPSP	disjunctive, endbeforestart		cplex			benchmark, https://	
Zhou96 [414]	scheduling, order, job, task, ma- chine, precedence, completion time, job shop, release date, due date		disjunctive	prolog	Z3				edge finding
Zhou97 [415]	scheduling, order, job, task, machine, precedence, preempt, completion time, job shop, re- lease date, due date		cumulative, dis- junctive	prolog	CHIP, ilog scheduler			benchmark	edge finder, edge finding
ZhouGL15 [416]	scheduling, order, job, task, resource, machine, transportation, make span, cmax, completion time, tardiness, flow shop, job shop, setup time, distributed, rescheduling	parallel ma- chine, HFF, FJS	$\operatorname{cumulative}$		gecode, or tools, CHIP			real world, http://	
ZhuS02 [417]	scheduling, activity, resource, distributed								
ZibranR11 [418] ZibranR11a [419]	scheduling, order, activity scheduling, order, activity, re- source, distributed			java	cplex, OPL cplex, OPL			http://	time tabling
abs-0907-0939 [302]	scheduling, order, task, activity, resource, preempt, make span, release date, due date		cumulative	java	choco, CHIP			real world, http://	edge finding, energetic rea- soning, sweep
abs-1901-07914 [41]	scheduling, order, task, resource, machine, make span, distributed, multi agent			python	or tools, mini zinc			benchmark, real world, http://, https://, github	
abs-1902-01193 [8]	scheduling, order, task, activity, resource			python, C++ , prolog	CHIP, ilog solver			1 /// 0	time tabling
abs-1902-09244 [160]	scheduling, order, job, task, activity, resource, machine, precedence, transportation, inventory, make span, completion time, tardiness, earliness, flow shop, job shop, release date, due date, setup time	RCPSP, FJS	cumulative, endbeforestart		cplex, OPL		food processing industry, steel industry	benchmark, real world, indus- try partner, https://	
abs-1911-04766 [134]	scheduling, order, job, task, activity, resource, precedence, make span, completion time, release date, due date, re scheduling	RCPSP	alternative constraint, cumulative, disjunctive, nooverlap, endbeforestart	java	cplex, gecode, cpo, chuffed, mini zinc			benchmark, generated in- stance, instance generator, real world, real life, industrial part- ner, http://, https://, github	time tabling
abs-2211-14492 [348]	scheduling, order, job, task, activity, resource, machine, precedence, transportation, make span, cmax, completion time, tardiness, flow shop, job shop, due date, setup time, distributed	single machine	cumulative, disjunctive, bin packing	python	cplex, or tools			benchmark, generated instance, ran- dom instance, https://	

	Table 5: Keywords by Work and Domains								
Work	Concepts	Classification	Constraints	ProgLanguages	CPSystems	Areas	Industries	Benchmarks	Algorithm
abs-2305-19888 [170]	scheduling, order, job, task, activity, resource, machine, precedence, preempt, sequence dependent setup, make span, cmax, completion time, flow shop, setup time, distributed, rescheduling	parallel machine	alternative constraint, cumulative, nooverlap		gurobi			benchmark, generated in- stance, real world, http://, https://, gitlab	
abs-2306-05747 [356]	scheduling, order, job, task, resource, machine, precedence, preempt, make span, completion time, flow time, tardiness, flow shop, job shop, re scheduling	JSSP	cumulative, disjunctive, nooverlap	java	choco			benchmark, industrial in- stance, real world, supple- mentary mate- rial, https://, github	
abs-2312-13682 [300]	scheduling, order, task, activity, resource, machine, transporta- tion, inventory, make span, re scheduling		cumulative, ta- ble constraint					generated instance, real world	
abs-2402-00459 [279]	scheduling, order, job, task, resource, machine, precedence, completion time, tardiness, earliness, job shop, due date, multi agent	single machine	cumulative, disjunctive, bin packing		or tools		mining industry	benchmark, generated in- stance, instance generator, real world, http://, https://, github	
cp-Hooker05 [179]	scheduling, order, job, task, resource, machine, precedence, make span, tardiness, release date, due date		cumulative, dis- junctive, circuit		cplex, OPL, ilog scheduler			7 ,,, 0	
cpaior-GayHS15 [130]	scheduling, order, task, resource, machine, preempt, manpower	RCPSP, psplib	cumulative, dis- junctive	java				benchmark, real world, https://, bitbucket	edge finding, not first, not last, energetic reasoning, time tabling, sweep
cpaior-SchuttFS13 [329]	scheduling, order, task, activity, resource, machine, precedence, preempt, make span, completion time, lazy clause generation	RCPSP, psplib	cumulative, dis- junctive, circuit		СНІР			benchmark, http://	edge finding, not last, ener- getic reasoning
cpaior-Vilim09 [381]	scheduling, order, task, activity, resource, preempt, completion time		$\operatorname{cumulative}$		ilog scheduler				edge finding, not last, ener- getic reasoning

			Table 6: Papers by Domain and Keyword		
Domain	Keyword	High	Medium	Low	
Concepts Concepts	Allen s algebra BOM	SubulanC22[347]			

		Table 6:	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	activity	AalianPG23[1], PovedaAA23[309], TardivoDFMP23[354], CampeauG22[72], SubulanC22[347], BenderWS21[47], KlankeBYE21[203], HubnerGSV21[184], AstrandJZ20[22], GeibingerMM19[135], MurinR19[273], abs-1902-09244[160], abs-1911-04766[134], AstrandJZ18[21], LaborieRSV18[222], BofillCSV17[57], CappartS17[73], LiuCGM17[239], Pralet17[310], YoungFS17[403], KreterSS17[217], BonfiettiZLM16[64], CauwelaertDMS16[76], GilesH16[140], LimHTB16[234], SzerediS16[351], NovaraNH16[283], DejemeppeCS15[92], KreterSS15[216], LombardiBM15[241], BonfiettiLM14[63], DejemeppeD14[93], DerrienP14[97], DerrienPZ14[98], GaySS14[131], GrimesIOS14[152], NovasH14[287], GuSS13[156], cpaior-SchuttFS13[329], OzturkTHO13[293], BonfiettiLBM12[62], SchuttCSW12[328], SerraNM12[335], SimoninAHL12[341], LombardiM12[245], NovasH12[286], BonfiettiLBM11[61], ClercqPBJ11[81], LombardiBMB11[242], Vilim11[382], ZibranR11a[419], HachemiGR11[158], KovacsB11[210], SchuttFSW11[332], LombardiM10[244], LopesCSM10[246], NovasH10[285], ZeballosQH10[409], LombardiM09[243], MonetteDH09[266], Vilim09[380], cpaior-Vilim09[381], abs-0907-0939[302], DoomsH08[102], MouraSCL08[271], KovacsB08[209], LiessM08[232], 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], Muscettola02[275], ArtiguesR00[17], BaptisteP00[29], SakkoutW00[325], GruianK98[155], PapaB98[296], BaptisteP97[28]	Bit-Monnot23[55], YuraszeckMCCR23[406], BoudreaultSLQ22[67], PopovicCGNC22[307], LunardiBLRV20[249], YangSS19[402], EscobetPQPRA19[110], Novas19[284], ShinBBHO18[338], BoothNB16[65], SchuttS16[333], VilimLS15[385], GoelSHFS15[144], 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]	PrataAN23[312], PerezGSL23[299], SquillaciPR23[346], abs-2305-19888[170], abs-2312-13682[300], OuelletQ22[291], HeinzNVH22[169], MullerMKP22[272], PohlAK22[305], abs-2211-14492[348], Astrand0F21[20], GeibingerMM21[136], HillTV21[175], 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], PesantRR15[301], PraletLJ15[311], NattafAL15[276], SimoninAHL15[342], WangMD15[392], AlesioNBG14[99], BartoliniBBLM14[35], KelarevaTK13[197], SchuttFS13[330], HeinzB12[164], LimtanyakulS12[237], EdisO11[105], TrojetHL11[367], MakMS10[253], SchuttW10[334], Laborie09[220], ArtiouchineB05[18], WolfS05[398], PoderBS04[304], Kumar03[219], Wolf03[397], Bartak02a[32], BeldiceanuC02[42], Vilim02[376], ZhuS02[417], Timpe02[362], HeipckeCCS00[171], BeckDF97[37], Colombani96[84], Wallace96[388], Puget95[313]
Concepts	batch process	LacknerMMWW23[224], LacknerMMWW21[223], QinWSLS21[314], NovaraNH16[283], KoschB14[208]	TangB20[352], NovasH10[285], Vilim02[376], SimonisC95[345]	PrataAN23[312], IsikYA23[186], YuraszeckMCCR23[406], GeitzGSSW22[137], LiFJZLL22[231], OujanaAYB22[292], AbreuN22[89], MullerMKP22[272], KlankeBYE21[203], FanXG21[115], ZhangYW21[411], MengZRZL20[262], EscobetPQPRA19[110], FahimiOQ18[113], LaborieRSV18[222], CauwelaertDMS16[76], GrimesH10[149], Simonis07[344], VilimBC05[384], ArtiguesBF04[16], Vilim04[378]
Concepts	bill of material			Simonis07[344]
Concepts	buffer capacity			LiFJZLL22[231], OujanaAYB22[292], NovasH14[287], Zebal- losH05[408]

		Table 6:	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	cmax	JuvinHHL23[188], KameugneFND23[193], YuraszeckMC23[405], IsikYA23[186], YuraszeckMCCR23[406], abs-2305-19888[170], AbreuN22[89], FetgoD22[116], abs-2211-14492[348], ArmstrongGOS21[13], AbohashimaEG21[2], QinWSLS21[314], GodetLHS20[143], MengZRZL20[262], QinDCS20[315], MalapertN19[254], WikarekS19[395], KameugneFGOQ18[192], GedikKEK18[132], VilimLS15[385], OzturkTHO13[293], BillautHL12[54], GrimesH11[150], LahimerLH11[225], BeldiceanuCDP11[43], GrimesH10[149], ZeballosQH10[409], ArtiguesBF04[16], PapaB98[296]	Mehdizadeh-Somarin23[260], ArmstrongGOS22[14], BoudreaultSLQ22[67], MullerMKP22[272], ParkUJR19[297], Novas19[284], ArbaouiY18[12], ZhouGL15[416], WangMD15[392], ZhangLS12[413], Muscettola02[275], ArtiguesR00[17]	JuvinHL23[189], HanenKP21[159], HubnerGSV21[184], ZhangYW21[411], BofillCSV17[57], LiuCGM17[239], SialaAH15[340], KoschB14[208], WatsonB08[393], LiessM08[232], AkkerDH07[370], KeriK07[199], KhayatLR06[200], BaptisteP00[29]
Concepts	completion time	PrataAN23[312], JuvinHL23[189], KameugneFND23[193], Mehdizadeh-Somarin23[260], OuelletQ22[291], AbreuN22[89], FetgoD22[116], SubulanC22[347], ArmstrongGOS21[13], KlankeBYE21[203], LunardiBLRV20[249], QinDCS20[315], ArbaouiY18[12], KameugneFGOQ18[192], FahimiOQ18[113], GedikKEK18[132], ZhangW18[412], DejemeppeCS15[92], ZhouGL15[416], KoschB14[208], OuelletQ13[289], HeinzSB13[168], 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], SchildW00[327]	abs-2305-19888[170], LiFJZLL22[231], OujanaAYB22[292], HeinzNVH22[169], MullerMKP22[272], abs-2211-14492[348], GeibingerMM21[136], HanenKP21[159], FanXG21[115], 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], GrimesH11[150], HermenierDL11[174], KameugneFSN11[194], NovasH10[285], ZeballosQH10[409], LombardiM09[243], MonetteDH09[266], MonetteDD07[265], VilimBC05[384], ArtiguesBF04[16], LimRX04[233], Vilim04[378], VilimBC04[383], Zhou97[415], Goltz95[147]	abs-2402-00459[279], JuvinHHL23[188], PerezGSL23[299], TasselGS23[355], AkramNHRSA23[7], IsikYA23[186], MontemanniD23a[267], abs-2306-05747[356], Armstrong-GOS22[14], GeitzGSSW22[137], PopovicCGNC22[307], WinterMMW22[396], Zhang,JZL22[410], CampeauG22[72], PohlAK22[305], HubnerGSV21[184], PandeyS21a[294], VlkHT21[387], GodetLHS20[143], WessenCS20[394], Astrand,JZ20[22], MengZRZL20[262], SacramentoSP20[322], MurinR19[273], Novas19[284], Tesch18[360], MossigeGSMC17[269], FontaineMH16[117], Tesch16[359], NovaraNH16[283], BurtLPS15[70], EvenSH15[111], KreterSS15[216], LombardiBM15[241], VilimLS15[385], EvenSH15a[112], Kameugne15[191], WangMD15[392], AlesioNBG14[99], GrimesIOS14[152], KameugneFSN14[195], NovasH14[287], SchuttFS13[330], BillautHL12[54], HeinzB12[164], LimtanyakulS12[237], ClercqPBJ11[81], HeinzS11[167], LahimerLH11[225], LombardiBMB11[242], Vilim11[382], SchuttFSW11[332], BertholdHLMS10[52], Davenport10[87], LombardiM10[244], DoomsH08[102], WatsonB08[393], AkkerDH07[370], ArtiouchineB05[18], Vilim05[379], WolfS05[398], HentenryckM04[172], Sadykov04[323], OddiiPCC03[288], HeipckeCCS00[171], PapaB98[296], Zhou96[414]
Concepts	continuous process			GaySS14[131], Bartak02[33], SimonisC95[345]

		Table 6:	Papers 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], OujanaAYB22[292], AbreuN22[89], ZhangW18[412], ZarandiKS16[407], AlesioNBG14[99], HermenierDL11[174], SunLYL10[349], LopesCSM10[246], BeniniBGM06[50], ZhuS02[417], SchildW00[327], Wallace96[388]	Bit-Monnot23[55], KimCMLLP23[202], SquillaciPR23[346], YuraszeckMC23[405], AkramNHRSA23[7], GurPAE23[157], MontemanniD23[268], abs-2305-19888[170], Boudreault-SLQ22[67], LiFJZLL22[231], WinterMMW22[396], HeinzNVH22[169], abs-2211-14492[348], BenderWS21[47], GeibingerKKMMW21[133], KovacsTKSG21[215], FanXG21[115], PandeyS21a[294], VlkHT21[387], ZhangYW21[411], BarzegaranZP20[36], WangB20[390], SacramentoSP20[322], BehrensLM19[40], FrohnerTR19[122], GalleguillosKSB19[124], ParkUJR19[297], EscobetPQPRA19[110], Novas19[284], WikarekS19[395], abs-1901-07914[41], NishikawaSTT18[280], NishikawaSTT18a[281], FahimiOQ18[113], LaborieRSV18[22], Madi-WambaLOBM17[252], MossigeGSMC17[269], BoothNB16[65], LimHTB16[234], EvenSH15[111], LombardiBM15[241], EvenSH15a[112], KoschB14[208], GrimesIOS14[152], GuSS13[156], BonfiettiLBM12[62], IfrimOS12[185], LombardiM12[245], ClercqPBJ11[81], ZibranR11a[419], KelbelH11[198], KovacsB11[210], TopalogluO11[364], TrojetHL11[367], CobanH10[82], MonetteDH09[266], LauLN08[226], MouraSCL08[271], MouraSCL08a[270], KhemmoudjPB06[201], QuSN06[316], AbrilSB05[3], WolfS05[398], Hooker05[178], VilimBC05[384], Hooker04[177], VilimBC04[383], WolinskiKG04[399], OddiPCC03[288], KuchcinskiW03[218], SakkoutW00[325], PapaB98[296], DincbaSH90[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], cp-Hooker05[179], ZeballosH05[408], ArtiguesR00[17], BelhadjiI98[46], BeckDF97[37]	abs-2402-00459[279], JuvinHHL23[188], KimCMLLP23[202], YuraszeckMC23[405], ZhangJZL22[410], MullerMKP22[272], SubulanC22[347], HanenKP21[159], KlankeBYE21[203], KovacsTKSG21[215], HubnerGSV21[184], VlkHT21[387], GroleazNS20[154], AstrandJZ20[22], LunardiBLRV20[249], ParkUJR19[297], EscobetPQPRA19[110], Laborie18a[221], GedikKEK18[132], LaborieRSV18[222], Hooker17[181], Pralet17[310], PraletLJ15[311], NattafAL15[276], BillautHL12[54], HeinzB12[164], IfrimOS12[185], LombardiM12[245], ClercqPBJ11[81], EdisO11[105], 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], Timpe02[362], BaptisteP00[29], HeipckeCCS00[171], 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], LacknerMMWW21[223], FanXG21[115], 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], Bartak02[33], Bartak02a[32], KamarainenS02[190], ArtiguesR00[17]

		Table 6: 1	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	flow shop	PrataAN23[312], JuvinHL23[189], IsikYA23[186], ArmstrongGOS22[14], LiFJZLL22[231], OujanaAYB22[292], ZhangJZL22[410], AbreuN22[89], ArmstrongGOS21[13], QinWSLS21[314], AstrandJZ20[22], MengZRZL20[262], ParkUJR19[297], Novas19[284], 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	flow time	FanXG21[115], NattafM20[278], MalapertN19[254], ZhangW18[412]	PrataAN23[312]	TasselGS23[355], YuraszeckMC23[405], YuraszeckMCCR23[406], abs-2306-05747[356], LiFJZLL22[231], AbreuN22[89], KoehlerBFFHPSS21[205], MengZRZL20[262], ParkUJR19[297], Novas19[284], 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], DavenportKRSH07[88], GarganiR07[125]	PrataAN23[312], PerezGSL23[299], GurPÁE23[157], abs-2312-13682[300], AbreuN22[89], PohlAK22[305], KovacsTKSG21[215], HubnerGSV21[184], 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 6:	Table 6: Papers by Domain and Keyword								
Domain	Keyword	High	Medium	Low							
Concepts	job	PrataAN23[312], abs-2402-00459[279], Bit-Monnot23[55], JuvinHHL23[188], JuvinHL23[189], KimCMLLP23[202], Mehdizadeh-Somarin23[260], TasselGS23[355], WangB23[391], YuraszeckMC23[405], IsikYA23[186], LacknerMMWW23[224], YuraszeckMCCR23[406], abs-2306-05747[356], ArmstrongGOS22[14], GeitzGSSW22[137], LiFJZLL22[231], OujanaAYB22[292], WinterMMW22[396], ZhangJZL22[410], AbreuN22[89], MullerMKP22[272], abs-2211-1449[348], ArmstrongGOS21[13], Astrand0F21[20], GeibingerMM21[136], HillTV21[175], KovacsTKSG21[215], LacknerMMW21[223], FanXG21[115], KoehlerBFFHPSS21[205], PandeyS21a[294], QinWSLS21[314], ZhangYW21[411], GodetLHS20[143], GroleazNS20[154], NattafM20[278], TangB20[352], WangB20[390], AstrandJZ20[22], BenediktMH20[48], LunardiBLRV20[249], MengZRZL20[262], SacramentoSP20[322], WallaceY20[389], BogaerdtW19[371], ColT19[83], GalleguillosKSB19[124], GeibingerMM19[135], MalapertN19[254], MurinR19[273], ParkUJR19[297], Novas19[284], WikarekS19[395], abs-1902-09244[160], abs-1911-04766[134], ArbaouiY18[12], BenediktSMVH18[49], LaborieRSV18[222], Tesch18[360], FahimiOQ18[113], GediKEKA18[132], LaborieRSV18[222], ZhangW18[412], Hooken17[181], Madi-WambaLOBM17[252], MossigeGSMC17[269], Pralet17[310], CauwelaertDMS16[76], FontaineMH16[117], Tesch16[359], DejemeppeC515[92], MossigeGSMC17[269], Pralet17[310], CauwelaertDMS16[76], FontaineMH16[117], Tesch16[359], DejemeppeC515[92], SalaAH15[340], VilimLS15[385], BartoliniBBLM14[35], DejemeppeD14[93], GaySS14[131], KoschB14[208], NovasH14[287], CireCH13[80], HeinzSB13[168], OzturkTH013[203], BillautHL12[54], HeinzB12[164], RendlPHPR12[318], LimtanyakuIS12[237], NovasH14[286], DeimerbH09[266], ThiruvadyBME09[361], DoomsH08[102], LauLn08[226], WatsonB08[303], AkkerDH07[370], DavenportKRSH07[88], Limtanyaku107[236], MonetteDD07[265], KhayatLR06[200], ArtiouchineBo5[18], ChuX05[79], DilkinaDH05[100], VilimD5[379], VilimBC05[384], ZeballosH05[408], ArtiguesBF04[16], HentenryckM04[172], LimRX04[233], Sadykov04[323], VilimBC04[383], DannaP03[85], Wolf03[37], RoldsekW03[37], Roldsek	EfthymiouY23[106], abs-2305-19888[170], HeinzNVH22[169], HanenKP21[159], Mercier-AubinGQ20[263], Tom19[363], EscobetPQPRA19[110], PourDERB18[308], CappartS17[73], NattafAL17[277], Madi-WambaB16[251], ZarandiKS16[407], PraletLJ15[311], ZhouGL15[416], LetortCB15[230], BonfiettiLM14[63], LombardiM12[245], KovacsK11[212], Simonis07[344], KovacsV06[214], Hooker06[180], Geske05[139], HebrardTW05[162], Hooker05[178], KovacsV04[213], VerfaillieL01[375], BaptisteP00[29], BaptisteP97[28], Caseau97[75], Puget95[313]	PovedaAA23[309], CampeauG22[72], PohlAK22[305], AntuoriHHEN21[11], BenderWS21[47], KlankeBYE21[203], WessenCS20[394], QinDCS20[315], FrimodigS19[121], BaptisteB18[26], ShinBBHO18[338], LimBTBB15[235], LombardiBM15[241], MelgarejoLS15[6], WangMD15[392], AlesioNBG14[99], BessiereHMQW14[53], DerrienPZ14[98], KameugneFSN14[195], BonfiettiLBM12[62], IfrimOS12[185], BonfiettiLBM11[61], KameugneFSN11[194], HachemiGR11[158], TrojetHL11[367], LopesCSM10[246], ZeballosQH10[409], SchuttFSW09[331], Vilim09[380], BarlatC08[31], KovacsB08[209], LiessM08[232], HoeveGSL07[373], KeriK07[199], KrogtLPHJ07[372], FrankK05[119], KovacsEKV05[211], WuBB05[401], cp-Hooker05[179], Vilim04[378], ValleMGT03[369], Vilim03[377], Bartak02[33], Bartak02a[32], KamarainenS02[190], Muscettola02[275], Timpe02[362], AngelsmarkJ00[01], KorbaaYG99[206], CestaOS98[77], Wallace96[388], DincbasSH90[101]							

		Table 6:	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], OujanaAYB22[292], MullerMKP22[272], abs-2211-14492[348], KovacsTKSG21[215], FanXG21[115], ZhangYW21[411], AstrandJZ20[22], LunardiBLRV20[249], MengZRZL20[262], ColT19[83], MurinR19[273], Novas19[284], FahimiOQ18[113], LaborieRSV18[222], ZhangW18[412], Pralet17[310], CauwelaertDMS16[76], FontaineMH16[117], DejemeppeCS15[92], SialaAH15[340], VilimLS15[385], SchuttFS13[330], BillautHL12[54], GrimesH11[150], KelbelH11[198], KovacsB11[210], GrimesH10[149], GrimesHM09[151], MonetteDH09[266], WatsonB08[393], MonetteDD07[265], KhayatLR06[200], ArtiouchineB05[18], DilkinaDH05[100], VilimD5[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], ArmstrongGOS21[13], Astrand0F21[20], KoehlerBFFHPSSS21[205], QinWSLS21[314], GroleazNS20[154], SacramentoSP20[322], EscobetPQPRA19[110], WikarekS19[395], CappartS17[73], MossigeGSMC17[269], BonfiettiLM14[63], GaySS14[131], LombardiM12[245], AronssonBK09[15], LauLN08[226], KovacsV06[214], Geske05[139], HebrardTW05[162], VilimBC05[384], KovacsV04[213], VilimBC04[383], BaptisteP00[29], BaptisteP97[28], Caseau97[75], Puget95[313], SimonisC95[345]	JuvinHL23[189], PovedaAA23[309], YuraszeckMC23[405], LacknerMMWW23[224], AntuoriHHEN21[11], HanenKP21[159], KlankeBYE21[203], Mercier-AubinGQ20[263], WessenCS20[394], BenediktMH20[48], WallaceY20[389], BogaerdtW19[371], FrimodigS19[121], ParkUJR19[297], Tom19[363], abs-1902-09244[160], BenediktSMVH18[49], ZarandiKS16[407], BurtLPS15[70], LimBTBB15[235], LombardiBM15[241], PraletLJ15[311], ZhouGL15[416], WangMD15[392], AlesioNBG14[99], DejemeppeD14[93], KoschB14[208], KameugneFSN14[195], NovasH14[287], HeinzKB13[165], BonfiettLBM12[62], BonfiettLBM11[61], KameugneFSN11[194], HachemiGR11[158], KovacsK11[212], TrojetHL11[367], LopesCSM10[246], ZeballosQH10[409], Laborie09[220], Vilim09[380], BarlattCG08[31], DoomsH08[102], LiessM08[232], DavenportKRSH07[88], HoeveGSL07[373], KeriK07[199], KrogtLPHJ07[372], Simonis07[344], KovacsEKV05[211], Vilim04[378], ValleMGT03[369], Vilim03[377], Bartak02[33], Bartak02a[32], 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], LacknerMMWW21[223], KoehlerBFFHPSSS21[205], Qin-WSLS21[314], ParkUJR19[297], Novas19[284], 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], BoudreaultSLQ22[67], GeitzGSSW22[137], OuelletQ22[291], FahimiOQ18[113], SchuttS16[333], SzerediS16[351], SialaAH15[340], BofillEGPSV14[58], GuSS13[156], SchuttCSW12[328]	KameugneFND23[193], TardivoDFMP23[354], WangB23[391], FetgoD22[116], GeibingerMM21[136], HillTV21[175], GodetLHS20[143], Mercier-AubinGQ20[263], WallaceY20[389], YangSS19[402], BaptisteB18[26], BofillCSV17[57], GoldwaserS17[146], YoungFS17[403], PesantRR15[301], LombardiM12[245], GrimesH11[150], SchuttW10[334]

Domain	Keyword	High	Medium	Low
Domain Concepts	Keyword machine	High  PrataAN23[312], abs-2402-00459[279], AalianPG23[1], ErthymiouY23[106], JuvinHHL23[188], JuvinHL23[189], KimCMLP23[202], Mehdizadeh-Somarin23[260], PerezGSL23[299], TasselGS23[355], VuraszeckMC23[405], IsikYA23[186], LacknerMMWW23[224], YuraszeckMCCR23[406], abs-2305-19888[170], abs-2306-65747[356], abs-2312-136882[300], ArmstrongGOS22[14], GeitzGSSW22[137], LiFJZLL2[231], OujanaAYB22[292], WinterMMW22[396], ZhangJZL22[410], AbreuN22[89], HeinzWH22[169], MullerMKP22[272], abs-2211-14492[348], AntuoriHHEN21[11], ArmstrongGOS21[13], Astrand0F21[20], BenderWS21[47], HanenKP21[159], KovacsTKSG21[215], LacknerMWW21[223], FanXG21[115], HubnerGSV21[184], KoehlerBFFHPSSS21[205], PandeyS21a[294], QimSLS21[314], ZhangYW21[411], GodetLHS20[143], GroleazNS20[154], NattafM20[278], TangB20[352], AstrandJZ20[22], BenediktMH20[48], LunardiBLRV20[249], MengZRL20[262], QinDCS20[315], SacramentoSP20[322], BogaerdtW19[371], ColT19[83], FrimodigS19[121], GalleguillosKSB19[124], MalapertN19[254], MurinR19[273], ParkUJR19[297], EscobetPQPRA19[110], Novas19[284], WikarekS19[395], abs-1901-07914[41], abs-1902-09244[160], ArbaouiY18[12], AstrandJZ18[21], BenediktSMVH18[49], Tesch18[360], GedikKEK18[132], LaborieRSV18[222], ZhangW18[412], Madi-WambaLOBM17[252], MossigeGSMC17[269], FontaineMH16[117], BurtLPS15[70], KreterS515[216], VilimLS15[385], ZhouGL15[416], BartoliniBBLM14[35], BessiereHMQW14[53], HoundjiSWD14[183], KoschB14[208], GrimesIOS14[152], NovasH14[287], SchuttFS13[330], OzturkTHO13[293], BillautHL12[54], IfrimOS12[185], LintanyakuS12[237], EdisO11[105], GrimesHM09[151], Laborie09[220], MonetteDH09[266], ThiruvadyBME09[361], WatsonB08[393], LiessM08[232], AkkerDH07[370], DavenportKRSH07[88], Limtanyaku107[236], MonetteDD07[265], Simonis07[344], KhayatLR66[200], ArtiouchineB05[18], DilkinaBH05[100], Geske05[139], QuirogaZH05[317], ZeballosH05[408], ArtiguesBF04[16], HenterryckM04[172], Sadykov04[323], OddiPCC03[288], ValleMGT03[369], Wolf03[397], Bartak02a[32], BeldiceanuC02[42], Timp902[362], AndenO02[42],	Bit-Monnot23[55], AkramNHRSA23[7], GurPAE23[157], HillTV21[175], KlankeBYE21[203], AbohashimaEG21[2], BehrensLM19[40], He0GLW18[161], BaptisteB18[26], FahimiOQ18[113], ShinBBH018[338], GoldwaserS17[146], Pralet17[310], KreterSS17[217], CauwelaertDMS16[76], SchuttS16[333], ZarandiKS16[407], DejemeppeCS15[92], MurphyMB15[274], SialaAH15[340], GaySS14[131], BonfiettiLBM12[62], LombardiM12[245], KelbelH11[198], SchuttFSW09[331], LauLN08[226], KovacsB08[209], KovacsV06[214], ChuX05[79], Vilim05[379], VilimBC05[384], VilimBC04[383], HookerY02[182], SakkoutW00[325], Wallace96[388]	KameugneFND23[193], MontemanniD23[268], Boudreau SLQ22[67], PopovicCGNC22[307], PohlAK22[305], Su ulanC22[347], GeibingerMM21[136], BarzegaranZP20[38] Mercier-AubinGQ20[263], WangB20[390], WallaceY20[38] Tom19[363], YangSS19[402], Laborie18a[221], Pou DERB18[308], BofillCSV17[57], CappartS17[73], Kletza derM17[204], LiuCGM17[239], YoungFS17[403], BoothNB16[61, LimHTB16[234], Szeredis16[351], NovaraNH16[283], Bofi GSV15[59], EvenSH15[111], LimBTBB15[235], Lor bardiBM15[241], MelgarejoLS15[6], cpaior-GayHS15[13] EvenSH15[3112], GoelSHFS15[144], LetortCB15[23], BofilECPSV14[58], BonfiettiLM14[63], DerrienP214[9: CircCH13[80], GuSS13[156], HeinzKB13[165], LetortCB13[22: cpaior-SchuttFS13[329], HeinzKB13[165], LetortCB13[22: cpaior-SchuttFS13[329], HeinzKB13[165], VasH12[286], BonfiettiLMI16[1], HeinzKH167], Herm nierDL11[174], LombardiBMB11[242], Vilim11[382], TrjetHL11[367], NovaSH10[285], BarlattCG08[31], DoomsH08[10: GarridoOS08[127], GarganiR07[125], HoeveGSL07[37], KrogtLPHJ07[372], Hooker06[180], HebrardTW05[16: cp-Hooker05[179], Hooker05[178], Hooker04[177], KvasV04[213], LimRX04[233], Vilim04[378], WolinskiKG04[39] PoderBS04[304], DannaP03[85], Bartak02[33], ElkhyariGJ02[10' KamarainenS02[190], MartinPV01[258], ArtiguesR00[17], RosekW98[320], BeckDF97[37], Simonis95[343], SimonisC95[344] DincbasSH90[101]

		Table 6:	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Concepts	make to order			OujanaAYB22[292], DavenportKRSH07[88]
Concepts	make to stock			
Concepts	make span	PrataAN23[312], AalianPG23[1], Bit-Monnot23[55], EfthymiouY23[106], JuvinHHL23[188], JuvinHL23[189], Mehdizadeh-Somarin23[260], PovedaAA23[309], TasselGS23[355], YuraszeckMC23[405], IsikYA23[186], LacknerMMWW23[224], abs-2305-19888[170], abs-2306-05747[356], ArmstrongGOS22[14], BoudreaultSLQ22[67], GeitzGSSW22[137], AbreuN22[89], HeinzNVH22[169], SubulanC22[347], ArmstrongGOS21[13], Astrand0F21[20], BenderWS21[47], HillTV21[175], KlankeBYE21[203], LacknerMMWW21[223], QinWSLS21[314], ZhangYW21[411], GodetLHS20[143], WessenCS20[394], AstrandJZ20[22], LunardiBLRV20[249], MengZRZL20[262], BehrensLM19[40], ColT19[83], GalleguillosKSB19[124], MalapertN19[254], ParkUJR19[297], Novas19[284], 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], SzerediS16[351], NovaraNH16[283], BurtLPS15[70], LombardiBM15[241], VilimLS15[385], ZhouGL15[416], WangMD15[392], BartoliniBBLM14[35], BonfiettiLM14[63], DejemeppeD14[93], DerrienPZ14[98], KoschB14[208], NovasH14[287], SchuttFS13[330], epaior-SchuttFS13[329], OzturkTHO13[293], BonfiettLBM12[62], NovasH12[286], GrimesH10[149], NovasH10[285], ZeballosQH10[409], GrimesHM09[151], GarridoAO09[126], WatsonBo8[393], GarridoOS08[127], KovacsV06[214], KhayatLR06[200], DilkinaDH05[100], FortinZDF05[118], Hooker05[178], ZeballosH05[408], ArtiguesBF04[16], HentenryckM04[172], Hooker04[177], ArtiguesR00[17], BaptisteP00[29], KorbaaYG99[206], PapaB98[296], BaptisteP97[28], BeckDF97[37], Darby-DowmanLM297[86]	KameugneFND23[193], PerezGSL23[299], YuraszeckMCCR23[406], abs-2312-13682[300], LiFJZLL22[231], OujanaAYB22[292], ZhangJZL22[410], MullerMKP22[272], abs-2211-14492[348], FanXG21[115], PandeyS21a[294], QinDCS20[315], AstrandJZ18[21], YoungFS17[403], KreterSS17[217], BonfiettiZLM16[64], DejemeppeCS15[92], GayHLS15[128], SialaAH15[340], KameugneFSN14[195], GuSS13[156], BillautHL12[54], SchuttCSW12[328], LombardiM12[245], 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], Popovic-CGNC22[307], CampeauG22[72], FetgoD22[116], HanenKP21[159], HubnerGSV21[184], KoehlerBFFHPSSS21[205], Mercier-AubinGQ20[263], NattafM20[278], TangB20[352], SacramentoSP20[322], 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], PraletLJ15[311], LetortCB15[230], NattafAL15[276], SimoninAHL15[342], AlesioNBG14[99], DerrienP14[97], GaySS14[131], CircCH13[80], KelarevaTK13[197], LetortCB13[229], OuelletQ13[289], LetortBC12[228], BonfiettiLBM11[61], EdisO11[105], KameugneFSN11[194], LahimerLH11[225], HachemiGR11[158], KelbelH11[198], LombardiM10[244], SchuttFW0[334], LopesCSM10[246], MonetteDH09[266], SchuttFW09[331], abs-0907-0939[302], KeriK07[199], Limtanyaku107[236], BeniniBGM06[50], LiuJ06[240], Hooker06[180], ArtiouchineB05[18], CarchraeBF05[74], WuBB05[401], cp-Hooker05[179], ValleMGT03[369], Bartak02[33], Bartak02a[32], ElkhyariGJ02[107], HeipckeCCS00[171], RodosekW98[320], Caseau97[75]
Concepts	manpower	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], SimonisC95[345]

		Table 6:	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]

Ethymion \( \frac{2}{1} \) [original \( \frac{1}{2} \) [	Table 6: Papers by Domain and Keyword					
AsianPC23[6], Bit-Monnez23[6], Fifthymriv 23[104], InvitalIII.23[18], Avairable 23[18], Avairable 23[1	Domain	Keyword	High	Medium	Low	
EvenSH15a[112], GoelSHFS15[144], LetortCB15[230], NattafAL15[276], SimoninAHL15[342], WangMD15[392], AlesioNBG14[99], BessiereHMQW14[53], BofillEGPSV14[58], BonfiettiLM14[63], DerrienP14[97], DerrienPZ14[98], GaySS14[131], Henrich Plate (1981), Month Plate (1981), Pla	Concepts	order	AalianPG23[1], Bit-Monnot23[55], EfthymiouY23[106], JuvinHHL23[188], JuvinHL23[189], KameugneFND23[193], KimCMLLP23[202], PerezGSL23[299], PovedaAA23[309], SquillaciPR23[346], TasselGS23[355], WangB23[391], IsikYA23[186], LacknerMMWW23[224], YuraszeckMCCR23[406], abs-2306-05747[356], abs-2312-13682[300], BoudreaultSLQ22[67], GeitzGSSW22[137], LiFJZLL22[231], OujanaAYB22[292], PopovicCGNC22[307], AbreuN22[89], CampeauG22[72], FetgoD22[116], MullerMKP22[272], PohlAK22[305], SubulanC22[347], abs-2211-14492[348], AntuoriHHEN21[11], ArmstrongGOS21[13], Astrand0F21[20], HanenKP21[159], KlankeBYE21[203], KovacsTKSG21[215], LacknerMMWW21[223], FanxG21[115], HubnerGSV21[184], KoehlerBFFHPSSS21[205], PandeyS21a[294], QinWSLS21[314], VlkHT21[387], BarzegaranZP20[36], GodetLHS20[143], GroleazNS20[154], Mercier-AubinGQ20[263], NattafM20[278], WangB20[390], WessenCS20[394], AstrandJZ20[22], BenediktMH20[48], LunardiBLRV20[249], MengZRZL20[262], SacramentoSP20[322], BehrensLM19[40], FrimodigS19[121], GeibingerMM19[135], LiuLH19[238], MalapertN19[254], MurinR19[273], ParkUIR19[297], YangSS19[402], EscobetPQPRA19[110], Novas19[284], WikareKS19[395], abs-1901-07914[41], abs-1902-09244[160], abs-1911-04766[134], AstrandJZ18[21], KameugneFGOQ18[192], NishikawaSTT18[280], NishikawaSTT18a[281], OuelletQ18[290], Tesch18[360], FahimiOQ18[113], GedikKEK18[132], LaborieRSV18[222], PourDERB18[308], ZhangW18[412], CappartS17[73], GoldwaserS17[146], KletzanderM17[204], LiuCGM17[239], Madi-WambaLOBM17[252], MossigeGSMC17[269], Pralet17[310], YoungFS17[403], KreterSS17[217], BonfiettiZLM16[64], BoothNB16[65], CauwelaertDMS16[76], Madi-WambaB16[251], SchuttS16[333], Tesch16[359], NovaraNH16[283], ZarandiKS16[407], DejemeppeCS15[92], EvenSH15[111], GayHLS15[128], LimBTBB15[235], LombardiBM15[241], MelgarejoLS15[6], MurphyMB15[274], PraletLJ15[311], SialaAH15[340], VilimLS15[385], ZhouGL15[416], EvenSH5[49], BessiereHMQW14[53], BofillEGPSV14[58], BonflettiLM14[63],	GurPAE23[157], MontemanniD23a[267], abs-2305-19888[170], ArmstrongGOS22[14], OuelletQ22[291], WinterMMW22[396], HeinzNVH22[169], BenderWS21[47], GeibingerMM21[136], HillTV21[175], TangB20[352], QinDCS20[315], WallaceY20[389], BogaerdtW19[371], ColT19[83], FrohnerTR19[122], DemirovicS18[95], BaptisteB18[26], ShinBBHO18[338], BofillCSV17[57], GelainPRVW17[138], NattafAL17[277], FontaineMH16[117], GilesH16[140], LimHTB16[234], BofillGSV15[59], BurtLPS15[70], GayHS15[129], KreterSS15[216], PesantRR15[301], DejemeppeD14[93], CireCH13[80], BonfiettiLBM12[62], LahimerLH11[225], LombardiBMB11[242], ZibranR11[418], Davenport10[87], AronssonBK09[15], SchuttFSW09[331], Vilim09[380], cpaior-Vilim09[381], abs-0907-0939[302], LauLN08[226], BeldiceanuP07[45], HoeveGSL07[373], KeriK07[199], BeniniBGM06[50], LiuJ06[240], KhayatLR06[200], ArtiouchineB05[18], FortinZDF05[118], Hooker04[177], WolinskiKG04[399], KuchcinskiW03[218], ElkhyariGJ02a[108], KamarainenS02[190], Muscettola02[275], ArtiguesR00[17], FrostD98[123], Belhadji198[46], Caseau97[75], Puget95[313], Touraivane95[366]	manniD23[268], ZhangJZL22[410], AbohashimaEG21[2], ZhangYW21[411], GalleguillosKSB19[124], abs-1902-01193[8], Hooker17[181], HechingH16[163], SzerediS16[351], cpaior-GayHS15[130], DoulabiRP14[103], GuSS13[156], HeinzKB13[165], SchuttFS13[330], HeinzB12[164], BonfiettiLBM11[61], ChapadosJR11[78], BertholdHLMS10[52], CobanH10[82], MakMS10[253], SunLYL10[349], Acuna-AgostMFG09[4], ThiruvadyBME09[361], DoomsH08[102], LiessM08[232], AkkerDH07[370], Limtanyakul07[236], GomesHS06[148], AbrilSB05[3], CarchraeBF05[74], ChuX05[79], Geske05[139], HebrardTW05[162], DannaP03[85], Kumar03[219], Vilim03[377], HookerY02[182], AngelsmarkJ00[10], RodosekW98[320],	

	Table 6: Papers by Domain and Keyword				
Domain	Keyword	High	Medium	Low	
Concepts	precedence	abs-2402-00459[279], JuvinHHL23[188], PovedaAA23[309], IsikYA23[186], YuraszeckMCCR23[406], BoudreaultSLQ22[67], CampeauG22[72], FetgoD22[116], PohlAK22[305], ArmstrongGOS21[13], Astrand0F21[20], GeibingerMM21[36], HanenKP21[159], HillTV21[175], FanXG21[115], HubnerGSV21[184], KoehlerBFFHPSSS21[205], ZhangYW21[411], GroleazNS20[154], Mercier-AubinGQ20[263], AstrandJZ20[22], LunardiBLRV20[249], MengZRZL20[262], SacramentoSP20[322], WikarekS19[395], abs-1902-09244[160], Laborie18a[221], NishikawaSTT18[280], NishikawaSTT18a[281], Tesch18[360], FahimiOQ18[113], LaborieRSV18[222], ZhangW18[412], BofillCSV17[57], Pralet17[310], YoungFS17[403], BonfiettiZLM16[64], SchuttS16[333], SzerediS16[351], NovaraNH16[283], DejemeppeCS15[92], MelgarejoLS15[6], PraletLJ15[311], LetortCB15[230], SimoninAHL15[342], DerrienPZ14[98], OuelletQ13[289], SchuttFS13[330], HeinzSB13[168], OzturkTHO13[293], BonfiettiLBM12[62], SchuttCSW12[328], LombardiM12[245], BonfiettiLBM11[61], ClercqPBJ11[81], GrimesH11[150], LombardiBMB11[242], KelbelH11[198], SchuttFSW11[332], TrojetHL11[367], LombardiBMB11[244], LombardiM09[243], MonetteDH09[266], SchuttFSW09[331], GarridoAO09[126], LiessM08[232], AkkerDH07[370], HoeveGSL07[373], BeniniBGM06[50], KovacsV06[214], KhayatLR06[200], Vilim05[379], Hooker05[178], VilimBC05[384], ArtiguesBF04[16], HentenryckM04[172], KovacsV04[213], Vilim04[378], ValleMGT03[369], Bartak02a[32], ElkhyariGJ02a[108], Muscettola02[275], VanczaM01[374], ArtiguesR00[17], BaptisteP00[29], HeipckeCCS00[171], SchildW00[327], BaptisteP97[28], DincbasSH90[101]	Bit-Monnot23[55], KameugneFND23[193], TardivoDFMP23[354], OujanaAYB22[292], SubulanC22[347], AntuoriHHEN21[11], VlkHT21[387], WessenCS20[394], QinDCS20[315], BogaerdtW19[371], ColT19[83], GeibingerMM19[135], MurinR19[273], Novas19[284], abs-1911-04766[134], KameugneFGOQ18[192], Madi-WambaLOBM17[252], MossigeGSMC17[269], Madi-WambaB16[251], BurtLPS15[70], GayHLS15[128], LombardiBM15[241], VllimLS15[385], WangMD15[392], BonfiettiLM14[63], KameugneFSN14[195], cpaior-SchuttFS13[329], BillautHL12[54], SimoninAHL12[341], LimtanyakulS12[237], NovasH12[286], KameugneFSN11[194], HachemiGR11[158], GrimesH10[149], MakMS10[253], LopesCSM10[246], NovasH10[285], ZeballosQH10[409], GrimesHM09[151], MouraSCL08[271], DavenportKRSH07[88], KeriK07[199], Hooker06[180], DilkinaDH05[100], FortinZDF05[118], ZeballosH05[408], Hooker04[177], VilimBC04[383], WolinskiKG04[399], PoderBS04[304], 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], WinterMMW22[396], ZhangJZL22[410], HeinzNVH22[169], MullerMKP22[272], abs-2211-14492[348], KovacsTKSG21[215], PandeyS21a[294], TangB20[352], DemirovicS18[95], He0GLW18[161], OuelletQ18[290], BaptisteB18[26], CappartS17[73], KreterSS17[217], BoothNB16[65], CauwelaertDMS16[76], FontaineMH16[117], Tesch16[359], GayHS15[129], SialaAH15[340], GoelSHFS15[144], DejemeppeD14[93], GaySS14[131], HoundjiSWD14[183], NovasH14[287], CireCH13[80], GuSS13[156], KelarevaTK13[197], LetortCB13[229], HeinzB12[164], LetortBC12[228], SerraNM12[335], HermenierDL11[174], LahimerLH11[225], Vilim11[382], KovacsB11[210], BertholdHLMS10[52], Laborie09[220], Vilim09[380], KrogtLPHJ07[372], Limtanyakul07[236], MonetteDD07[265], QuSN06[316], ArtiouchineB05[18], FrankK05[119], KovacsEKV05[211], QuirogaZH05[317], cp-Hooker05[179], Sadykov04[323], OddiPCC03[288], KuchcinskiW03[218], Bartak02[33], ElkhyariGJ02[107], KamarainenS02[190], Vilim02[376], SakkoutW00[325], Colombani96[84], Goltz95[147], Simonis95[343]	

	Table 6: Papers by Domain and Keyword				
Domain	Keyword	High	Medium	Low	
Concepts	preempt	JuvinHHL23[188], PovedaAA23[309], SubulanC22[347], HanenKP21[159], BaptisteB18[26], FahimiOQ18[113], 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], OuelletQ22[291], FetgoD22[116], HeinzNVH22[169], Mercier-AubinGQ20[263], LunardiBLRV20[249], SacramentoSP20[322], YoungFS17[403], NattafAL15[276], SimoninAHL15[342], OzturkTHO13[293], SimoninAHL12[341], SchuttFSW11[332], Laborie09[220], SchuttFSW09[331], KovacsB08[209], ArtiouchineB05[18]	AalianPG23[1], KameugneFND23[193], Mehdizadeh-Somarin23[260], TardivoDFMP23[354], TasselGS23[355], YuraszeckMCC3[405], AkramNHRSA23[7], IsikYA23[186], YuraszeckMCCR23[406], abs-2306-05747[356], Boudreault-SLQ22[67], GeitzGSSW22[137], OujanaAYB22[292], AbreuN22[89], MullerMKP22[272], ArmstrongGOS21[13], BenderWS21[47], HillTV21[175], KovacsTKSG21[215], FanXG21[115], HubnerGSV21[184], QinWSLS21[314], ZhangYW21[411], GroleazNS20[154], BenediktMH20[48], MengZRZL20[262], ParkUJR19[297], YangSS19[402], WikarekS19[395], BenediktSMVH18[49], Tesch18[360], GedikKEK18[132], ShinBBHO18[338], ZhangW18[412], BofillCSV17[57], MossigeGSMC17[269], KreterSS17[217], CauwelaertDMS16[76], SchuttS16[333], SzerediS16[351], DejemeppeCS15[92], GayHS15[129], KreterSS15[216], cpaior-GayHS15[130], Kameugne15[191], GrimesIOS14[152], KameugneFSN14[195], OuelletQ13[289], cpaior-SchuttFS13[329], HeinzSB13[168], SchuttCSW12[328], SerraNM12[335], EdisO11[105], HeinzS11[167], KameugneFSN11[194], LahimerLH11[225], Vilim11[382], KelbelH11[198], TopalogluO11[364], BertholdHLMS10[52], CobanH10[82], SchuttW10[334], ZeballosQH10[409], LombardiM09[243], MonetteDH09[266], Vilim09[380], cpaior-Vilim09[381], abs-0907-0939[302], MouraSCL08[271], LiessM08[232], AkkerDH07[370], BeldiceanuP07[45], DavenportKRSH07[88], KhayatLR06[200], Vilim05[379], WolfS05[398], ArtiguesBF04[16], LimRX04[233], Sadykov04[323], PoderBS04[304], OddiPCC03[288], ElkhyariGJ02[107], KamarainenS02[190], ArtiguesR00[17], HeipzekCCS00[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	BarzegaranZP20[36], ZhangW18[412], CappartS17[73], Madi-WambaLOBM17[252], GrimesIOS14[152], IfrimOS12[185], RendlPHPR12[318], LombardiM12[245], 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], PerezGSL23[299], TasselGS23[355], GurPAE23[157], 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], NishikawaSTT18a[281], LaborieRSV18[222], BoothNB16[65], HechingH16[163], NovaraNH16[283], MurphyMB15[274], ZhouGL15[416], WangMD15[392], DerrienPZ14[98], KelarevaTK13[197], TopalogluO11[364], LopesCSM10[246], GarridoAO09[126], MouraSCL08a[270], HoeveGSL07[373], Simonis07[344], ArtiouchineB05[18], Geske05[139], Bartak02a[32], ElkhyariGJ02[107], ElkhyariGJ02a[108], BaptisteP00[29], SakkoutW00[325], GruianK98[155], PapaB98[296], BaptisteP97[28], BeckDF97[37]	

	Table 6: Papers by Domain and Keyword				
Domain	Keyword	High	Medium	Low	
Concepts	release date	WinterMMW22[396], HanenKP21[159], EscobetPQPRA19[110], Tesch18[360], KameugneFSN14[195], SerraNM12[335], LimtanyakulS12[237], 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]	PovedaAA23[309], YuraszeckMC23[405], IsikYA23[186], PohlAK22[305], AntuoriHHEN21[11], GeibingerMM21[136], 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], BillautHL12[54], HeinzB12[164], ClercqPBJ11[81], GrimesH11[150], KovacsK11[212], Davenport10[87], SchuttW10[334], MonetteDH09[266], KovacsB08[209], BeldiceanuP07[45], ChuX05[79], QuirogaZH05[317], ArtiguesBF04[16], PoderBS04[304], ArtiguesR00[17], BaptisteP00[29], HeipckeCCS00[171], BelhadjiI98[46], BaptisteP97[28], BeckDF97[37]	

Domain	Keyword	High	Medium	Low
Concepts	resource	PrataAN23[312], abs-2402-00459[279], AalianPG23[1], JuvinHHL23[188], KameugneFND23[193], PovedaAA23[309], TardivoDFMP23[354], WangB23[391], GurPAE23[157], YuraszeckMCCR23[406], abs-2305-19888[170], BoudreaultSLQ22[67], GeitzGSSW22[137], OuelletQ22[291], OujanaAYB22[292], AbreuN22[89], CampeauG22[72], FetgoD22[116], HeinzNVH22[169], SubulanC22[347], BenderWS21[47], GeibingerMM21[136], HanenKP21[159], HillTV21[175], KovacsTKSG21[215], HubnerGSV21[184], PandeyS21a[294], VikHT21[387], ZhangYW21[411], GodetLHS20[143], GroleazNS20[154], Mercier-AubinGQ20[263], WangB20[390], AstrandJZ20[22], MengZRZL20[262], QinDCS20[315], SacramentoSP20[322], BehrensLM19[40], GalleguillosKSB19[124], GeibingerMM19[135], LiuLH19[238], MalapertN19[254], MurinR19[273], Tom19[363], YangSS19[402], EscobetPQPRA19[110], Novas19[284], WikarekS19[395], abs-1901-07914[41], abs-1902-09244[160], abs-1911-04766[134], ArbaouiY18[12], DemirovicS18[95], KameugneFGOQ18[192], Laborie18a[221], NishikawaSTT18[280], NishikawaSTT18a[281], OuelletQ18[290], Tesch18[360], BaptisteB18[26], FahimiOQ18[113], LaborieRSV18[222], ShinBBHO18[338], BofillCSV17[57], CappartS17[73], Madi-WambaLOBM17[252], MossigeGSMC17[269], Pralet17[310], YoungFS17[403], KreterSS17[217], NattafAL17[277], BonficttiZLM16[64], CauwelaertDMS16[76], FontaineMH16[117], GilesH16[140], Madi-WambaB16[251], SchuttS16[333], SzerediS16[351], Tesch16[359], NovaraNH16[283], BurtLPS15[70], DejemeppeCS15[92], EvenSH15[111], GayHS15[129], KreterSS15[216], LombardiBM15[241], PraletLJ15[311], SialaAH15[340], VilimLS15[385], cpaior-GayHS15[130], EvenSH15[112], GoelSHFS15[144], Kameugne15[191], LetortCB15[230], NattafAL15[276], SimoninAHL15[342], WangMD15[392], AlesioNBG14[99], BartoliniBBLM14[35], BessiereHMQW14[53], BonfiettiLM14[63], DejemeppeD14[93], GaySS14[131], KoschB14[208], GrimesIOS14[152], KameugnerSN14[195], NovaH14[287], Gulla Calleguer Galleguer Gallegue	Bit-Monnot23[55], PerezGSL23[299], TasselGS23[355], Caballero23[71], IsikYA23[186], abs-2306-05747[356], abs-2312-13682[300], WinterMMV22[396], MullerMKP22[272], PohlAK22[305], abs-2211-14492[348], Astrand0F21[20], KlankeBYE21[203], TangB20[352], LunardiBLRV20[249], WallaceY20[389], FrimodigS19[121], ParkUJR19[297], abs-1902-01193[8], BenediktSMVH18[49], GedikKEK18[132], GelainPRVW17[138], GoldwaserS17[146], BoothNB16[65], ZhouGL15[416], DerrienP14[97], DerrienPZ14[98], DoulabiRP14[103], 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], ErtlK91[109], DincbasSH90[101]	SquillaciPR23[346], AkramNHRSA23[7], MontemanniD23[268], ArmstrongGOS22[14], PopovicCGNC22[307], ZhangJZL22[410], AntuoriHHEN21[11], ArmstrongGOS21[13], AbohashimaEG21[2 FanXG21[15], KoehlerBFFHFPSS21[205], BarzegaranZP20[36], NattafM20[278], ColT19[83], AstrandJZ18[21], ZhangW18[412], Hooker17[181], KletzanderM17[204], ZarandikS16[407] GayHLS15[128], MelgarejoLS15[6], MurphyMB15[274], Siala15[339], HoundjiSWD14[183], CircCH13[80], BilautHL12[54], IfrimOS12[185], ZibranR11a[419], Thiru vadyBME09[361], BarlattCG08[31], GarganiR07[125], Monet teDD07[265], RossiTHP07[321], LiuJ06[240], FortinZDF05[118], FrankK05[119], ArtiguesBF04[16], Tsang03[368], Timpe02[362], MartinPY01[258], AngelsmarkJ00[10], RodosekW98[320], Colom bani96[84]

LombardiM12[245], NovasH12[286], BonfiettiLBM11[61], ClercqPBJ11[81], EdisO11[105], GrimesH11[150], HeinzS11[167], HermenierDL11[174] KameugneFSN11[194]

		Table 6:	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Domain Concepts	Keyword scheduling	High  PrataAN23[312], abs-2402-00459[279], AalianPG23[1], Bit-Monnot23[55], EfthymiouY23[106], JuvinHHL23[188], JuvinHL23[189], KameugneFND23[193], KimCMLLP23[202], Mehdizadeh-Somarin23[260], PerezGSL23[299], PovedaAA23[309], SquillaciPR23[346], TardivoDFMP23[354], TasselGS23[355], WangB23[391], YuraszeckMC23[405], AkramNHRSA23[7], Caballero23[71], GurPAE23[157], IsikYA23[186], LacknerMMWV23[224], MontemanniD23[268], MontemanniD23a[267], YuraszeckMCCR23[406], abs-2305-19888[170], abs-2306-05747[356], abs-2312-13682[300], ArmstrongGOS22[14], BoudreaultSLQ22[67], GeitzGSSW22[137], LiFJZLL22[231], OuelletQ22[291], OujanaAYB22[292], PopovicGNC22[307], WinterMMW22[396], ZhangJZL22[410], AbreuN22[89], CampeauG22[72], FetgoD22[116], HeinzNVH22[169], MullerMKP22[272], PohlAK22[305], SubulanC22[347], abs-2211-14492[348], AntuoriHHEN21[11], ArmstrongGOS21[13], Astrand0F21[20], BenderWS21[47], GeibingerKKMMW21[133], GeibingerMM21[136], HanenKP21[159], HillTV21[175], KlankeBYE21[203], KovacsTKSG21[215], LacknerMMWW21[223], AbohashimaEG21[2], FanXG21[115], HubnerGSV21[184], KoehlerBFFHPSSS21[205], PandeyS21a[294], QinWSLS21[314], VIkHT21[387], ZhangYW21[411], BarzegaranZP20[36], GodetLHS20[143], GroleazNS20[154], Mercier-AubinGQ20[263], NattafM20[278], TangB20[352], WangB20[390], WessenCS20[394], AstrandJZ20[22], BenediktMH20[48], LunardiBLRV20[249], MengZRZL20[262], QinDCS20[315], SacramentoSP20[322], WallaceY20[389], BehrensLM19[40], BogaerdtW19[371], ColT19[83], FrimodigS19[121], FrohnerTR19[122], GalleguillosKSB19[124], GeibingerMM19[135], LiuLH19[238], MalapertN19[297], Tonn19[363], YangSS19[402], EscobetPQPRA19[110], Novas19[284], WikarekS19[395], abs-1901-07914[41], abs-1902-0113[8], abs-1902-00244[160], abs-1911-04766[134], ArbaouiY18[12], AstrandJZ18[21], BenediktSMVH18[49], DemirovicS18[95], HeoCLW18[161], KameugneFGOQ18[192], Laborie18a[221], NishikawaSTT18[280], NishikawaSTT18a[281], OuelletQ18[290], Tesch18[360], BaptisteB18[26], FahimiOQ18[113], GedikKEK18[132], LaborieRSV18[22], PourDERB18[308], ShinBHO18[338	GayHS15[129], Kameugne15[191], BessiereHMQW14[53], HoundjiSWD14[183], LetortCB13[229], LetortBC12[228], ChapadosJR11[78], ClercqPBJ11[81], 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], CestaOS98[77], FrostD98[123], Touraivane95[366]	Low Hooker17[181], RossiTHP07[321], AbrilSB05[3], VanczaM01[374]
		Madi-WambaLOBM17[252], MossigeGSMC17[269], Pralet17[310], YoungFS17[403], KreterSS17[217], NattafAL17[277], BonfiettiZLM16[64]		

	Table 6: Papers by Domain and Keyword					
Domain	Keyword	High	Medium	Low		
Concepts	sequence dependent setup	GedikKEK18[132]	IsikYA23[186], GeitzGSSW22[137], MengZRZL20[262], LombardiM12[245], Simonis07[344], ArtiguesBF04[16]	PrataAN23[312], abs-2305-19888[170], OujanaAYB22[292], HeinzNVH22[169], PohlAK22[305], ArmstrongGOS21[13], Mercier-AubinGQ20[263], MalapertN19[254], Novas19[284], ArbaouiY18[12], FahimiOQ18[113], LaborieRSV18[222], Pralet17[310], CauwelaertDMS16[76], NovaraNH16[283], DejemeppeCS15[92], KovacsK11[21], GrimesH10[149], Laborie09[220], AkkerDH07[370], DavenportKRSH07[88], VilimBC05[384], Vilim04[378], Vilim02[376]		
Concepts	setup time	PrataAN23[312], IsikYA23[186], LacknerMMWW23[224], abs-2305-19888[170], GeitzGSSW22[137], OujanaAYB22[292], WinterMMW22[396], AbreuN22[89], HeinzNVH22[169], PohlAK22[305], LacknerMMWW21[223], GroleazNS20[154], Mercier-AubinGQ20[263], NattafM20[278], LunardiBLRV20[249], MengZRZL20[262], 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], ArmstrongGOS21[13], FanXG21[115], AstrandJZ20[22], LaborieRSV18[222], NovaraNH16[283], GaySS14[131], KelarevaTK13[197], OzturkTHO13[293], ThiruvadyBME09[361], BeniniBGM06[50], Vilim02[376], Timpe02[362]	EfthymiouY23[106], JuvinHHL23[188], JuvinHL23[189], Mehdizadeh-Somarin23[260], YuraszeckMCCR23[406], ZhangJZL22[410], MullerMKP22[272], abs-2211-14492[348], BenderWS21[47], AbohashimaEG21[2], ZhangYW21[411], GodetLHS20[143], BehrensLM19[40], WikarekS19[395], abs-1902-09244[160], FahimiOQ18[113], GilesH16[140], MelgarejoLS15[6], SialaAH15[340], ZhouGL15[416], GoelSHFS15[144], BessiereHMQW14[53], DejemeppeD14[93], BillautHL12[54], NovasH10[285], Laborie09[220], BarlattCG08[31], KovacsV06[214], KhayatLR06[200], 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] JuvinHL23[189], Mehdizadeh-Somarin23[260], TasselGS23[355],		
Concepts	tardiness	PrataAN23[312], KimCMLLP23[202], IsikYA23[186], LacknerMMWW23[224], OujanaAYB22[292], WinterMMW22[396], AbreuN22[89], PohlAK22[305], abs-2211-14492[348], AntuoriHHEN21[11], LacknerMMWW21[223], FanXG21[115], Mercier-AubinGQ20[263], TangB20[352], MengZRZL20[262], BogaerdtW19[371], ParkUJR19[297], abs-1902-09244[160], LaborieRSV18[222], NovaraNH16[283], ZarandiKS16[407], BartoliniBBLM14[35], LombardiM12[245], GrimesH11[150], KelbelH11[198], KovacsB11[210], CobanH10[82], Davenport10[87], Laborie09[220], MonetteDH09[266], KeriK07[199], Hooker06[180], cp-Hooker05[179], ZeballosH05[408], HentenryckM04[172], DannaP03[85]	abs-2402-00459[279], SubulanC22[347], KovacsTKSG21[215], GroleazNS20[154], GedikKEK18[132], Hooker17[181], NovasH10[285], QuirogaZH05[317], Hooker05[178]	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], Tom19[363], Novas19[284], ZhangW18[412], BurtLPS15[70], DejemeppeCS15[92], 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]		

	Table 6: Papers by Domain and Keyword						
Domain	Keyword	High	Medium	Low			
Concepts	task	PrataAN23[312], abs-2402-00459[279], JuvinHHL23[188], JuvinHL23[189], KameugneFND23[193], PovedaAA23[309], WangB23[391], AkramNHRSA23[7], YuraszeckMCCR23[406], abs-2305-19888[170], BoudreautSLQ22[67], GeitzGSSW22[137], LiFJZLL22[231], OuelletQ22[291], CampeauG22[72], FetgoD22[116], HeinzNVH22[169], SubulanC22[347], abs-2211-14492[348], ArmstrongGOS21[13], Astrand6F21[20], HanenKP21[159], HillTV21[175], KlankeBYE21[203], KovacsTKSG21[215], KoehlerBFFHPSSS21[205], PandeyS21a[294], GodetLHS20[143], Mercier-AubinGQ20[263], WangB20[390], WessenCS20[394], QinDCS20[315], BehrensLM19[40], GeibingerMM19[135], Tom19[363], YangSS19[402], EscobetPQPRA19[110], Novas19[284], abs-1901-07914[41], abs-1911-04766[134], AstrandJZ18[21], KameugneFGOQ18[192], NishikawaSTT18[280], NishikawaSTT18a[281], OuelletQ18[290], BaptisteB18[26], FahimiOQ18[113], LaborieRSV18[222], PourDERB18[308], ShinBBHO18[338], Madi-WambaLOBM17[252], MossigeGSMC17[269], KreterSS17[217], NattafAL17[277], BothNB16[65], FontaineMH16[117], GilesH16[140], Madi-WambaB16[251], NovaraNH16[283], BurtLPS15[70], EvenSH15[111], GayHS15[129], KreterSS15[216], MurphyMB15[274], PraletLJ15[311], SialaAH15[340], VillmLS15[385], ZhouGL15[416], cpaior-GayHS15[130], EvenSH15a[112], GoelSHFS15[144], LetortCB15[230], NattafAL15[276], SimoninAHL15[342], AlesioNBG14[99], BessiereHMQW14[53], GrimeslOS14[152], KameugneFSN14[195], NovaSH14[287], KelarevaTK13[197], LetortCB13[229], OuelletQ13[289], SchuttFS13[330], cpaior-SchuttFS13[329], OzturkTH013[293], IfrimOS12[185], LetortBC12[228], SimoninAHL15[341], LombardiM12[245], NovasH12[286], BonfiettiLBM11[61], GrimesH11[198], KovacsK11[212], SchuttFSW1[332], TrojetHL11[367], GrimesH10[149], LahimerLH11[225], LombardiBMB11[242], Villm11[382], BeldiceanuCDP11[43], HachemiGR11[158], KelbelH11[198], KovacsK11[212], SchuttFSW1[334], SunLYL10[349], NovasH10[285], SchuttFSW09[331], cpaior-Vilim09[381], GarridoOS08[127], LiessW08[232], BeldiceanuP07[45], HoeswGSL07[373], MonetteDD07[265], Simonis07[344], BeniniBGM06[650] Commission(7344],	Bit-Monnot23[55], SquillaciPR23[346], IsikYA23[186], LacknerMMWW23[224], MontemanniD23[268], MontemanniD23a[267], OujanaAYB22[292], PopovicCGNC22[307], WinterMMW22[396], AbreuN22[89], MullerMKP22[272], BenderWS21[47], GeibingerMM21[136], HubnerGSV21[184], BarzegaranZP20[36], WallaceY20[389], WikarekS19[395], DemirovicS18[95], LiuCGM17[239], YoungFS17[403], HechingH16[163], GayHLS15[128], LombardiBM15[241], Kameugne15[191], BartoliniBBLM14[35], BofillEGPSV14[58], BonfiettiLM14[63], Vilim05[379], MartinPY01[258], AngelsmarkJ00[10], PapaB98[296]	EfthymiouY23[106], PerezGSL23[299], TardivoDFMP23[354], TasselGS23[355], abs-2312-13682[300], Armstrong-GOS22[14], ZhangJZL22[410], AntuoriHHEN21[11], LacknerMMWW21[223], FanXG21[115], ZhangYW21[411], AstrandJZ20[22], BenediktMH20[48], MengZRZL20[262], SacramentoSP20[322], FrimodigS19[121], MalapertN19[254], MurinR19[273], ParkUR19[297], abs-1902-099244[160], Laborie18a[221], Tesch18[360], GedikKEK18[132], CappartS17[73], CauwelaertDMS16[76], Szeredis16[351], WangMD15[392], DoulabiRP14[103], CireCH13[80], HeinzSSW12[166], ChapadosJR11[78], EdisO11[105], BartakS11[34], SchausHMCMD11[326], TopalogluO11[364], MakMS10[253], LopeCSM10[246], DoomsH08[102], Limanyaku107[236], LiuJ06[240], CarchraeBF05[74], VilimBC05[384], HentenryckM04[172], Sadykov04[323], Vilim04[378], OddiPCC03[288], VerfaillieL01[375], Mason01[259], BaptisteP00[29], SakkoutW00[325], KorbaaYG99[206], GruianK98[155], BaptisteP97[28], BeckDF97[37], Puget95[313], Simonis95[343], Touraivane95[366], ErtlK91[109]			

	Table 6: 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], PopovicCGNC22[307], AbreuN22[89], SubulanC22[347], AbohashimaEG21[2], MengZRZL20[262], LaborieRSV18[222], EvenSH15[111], MelgarejoLS15[6], RendlPHPR12[318], MakMS10[253], MouraSCL08[271], MouraSCL08a[270], LimRX04[233], Mason01[259], ArtiguesR00[17], Wallace96[388]	AalianPG23[1], PerezGSL23[299], WangB23[391], IsikYA23[186], MontemanniD23a[267], abs-2312-13682[300], Boudreault-SLQ22[67], LiFJZLL22[231], ZhangJZL22[410], abs-2211-14492[348], AntuoriHHEN21[11], HubnerGSV21[184], WallaceY20[389], Tom19[363], Novas19[284], abs-1902-09244[160], He0GLW18[161], GedikKEK18[132], ShinBBHO18[338], ZhangW18[412], GoldwaserS17[146], KletzanderM17[204], LiuCGM17[239], GilesH16[140], ZarandiKS16[407], PesantRR15[301], ZhouGL15[416], EvenSH15a[112], SimoninAHL15[342], HoundjiSWD14[183], LombardiM12[245], 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], KobaaYG99[206], RodosekW98[320], Puget95[313], Simonis95[343], SimonisC95[345]	
Classification	2BPHFSP	TangB20[352]		·	
Classification	BPCTOP	KelarevaTK13[197]		YF 1	
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]	Out 11st O12[200]	Tonding DEMD99[254] Honon VD91[150] Donnion D14[07]	
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]		
Classification	Earth Observation Scheduling Problem		SquillaciPR23[346]		
Classification	FJS	WangB23[391], YuraszeckMCCR23[406], MullerMKP22[272], WangB20[390], LunardiBLRV20[249], MengZRZL20[262], Novas19[284], MossigeGSMC17[269]	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	T I THE COLOR OF A CONTRACT	MurinR19[273]	Troil - Montaged - Market - Ma	
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]	Volement TV 19[107]		
Classification	Liner Shipping Fleet Repositioning Problem		KelarevaTK13[197]		
Classification	MGAP	Darby-DowmanLMZ97[86]			
Classification	Modified Generalized Assignment Problem				

		Table 6	Papers by Domain and Keyword	
Domain	Keyword	High	Medium	Low
Classification	OSP	Bit-Monnot23[55], LacknerMMWW23[224], LacknerMMWW21[223], GayHLS15[128]	SquillaciPR23[346], GrimesHM09[151], MonetteDD07[265]	MengZRZL20[262]
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		PapaB98[296]	
Classification	PMSP	WinterMMW22[396], PandeyS21a[294], GodetLHS20[143], MalapertN19[254], GedikKEK18[132]	VlkHT21[387], NattafM20[278]	OujanaAYB22[292]
Classification	PP-MS-MMRCPSP	ar m toolowol a.t.l		
Classification	PTC	NattafM20[278], MalapertN19[254]		
Classification	Pre-emptive Job-Shop scheduling Problem			
Classification	RCPSP	PovedaAA23[309], YuraszeckMCCR23[406], BoudreaultsLQ22[67], CampeauG22[72], FetgoD22[116], SubulanC22[347], BenderWS21[47], GeibingerMM21[136], HillTV21[175], HubnerGSV21[184], GeibingerMM19[135], abs-1902-09244[160], abs-1911-04766[134], KameugneFGOQ18[192], LaborieRSV18[222], BofillCSV17[57], MossigeGSMC17[269], Pralet17[310], YoungFS17[403], KreterSS17[217], SchuttS16[333], SzerediS16[351], KreterSS15[216], VilimLS15[385], HeinzSB13[168], LombardiM12[245], TrojetHL11[367], BertholdHLMS10[52], LombardiM10[244], SchuttW10[334], LombardiM09[243], DoomsH08[102], LiessM08[232], ElkhyariGJ02a[108], BaptisteP00[29], BaptisteP97[28]	KameugneFND23[193], TardivoDFMP23[354], Caballero23[71], KovacsTKSG21[215], Tesch18[360], BaptisteB18[26], GayHLS15[128], LombardiBM15[241], NattafAL15[276], KameugneFSN14[195], HeinzS11[167], KameugneFSN11[194], KeriK07[199], KovacsV06[214], ArtiguesR00[17], HeipckeCCS00[171]	GeitzGSSW22[137], HanenKP21[159], ZhangYW21[411], Mercier-AubinGQ20[263], WikarekS19[395], OuelletQ18[290], FahimiOQ18[113], BonfiettiZLM16[64], Tesch16[359], SialaAH15[340], cpaior-GayHS15[130], BonfiettiLM14[63], DerrienPZ14[98], KoschB14[208], LetortCB13[229], OuelletQ13[289], SchuttFS13[330], cpaior-SchuttFS13[329], BonfiettiLBM12[62], BonfiettiLBM11[61], GrimesH11[150], LahimerLH11[225], LombardiBMB11[242], Vilim11[382], SchuttFSW11[332], AkkerDH07[370], PoderBS04[304], ElkhyariGJ02[107], HookerY02[182]
Classification	RCPSPDC			CampeauG22[72], HubnerGSV21[184]
Classification	Resource-constrained Project Scheduling Problem with Discounted Cashflow			
Classification	SBSFMMAL	OzturkTHO13[293]		
Classification	SCC	KimCMLLP23[202], WolinskiKG04[399]		PohlAK22[305], SchausHMCMD11[326]
Classification Classification	SMSDP Steel-making and con-			
C1 'C '	tinuous casting	D II 11100[46]		
Classification	TCSP	BelhadjiI98[46]		Command C17[72]
Classification	TMS	PopovicCGNC22[307]	D.H. 12100[4c]	CappartS17[73]
Classification	Temporal Constraint Satisfaction Problem		BelhadjiI98[46]	
Classification	parallel machine	PrataAN23[312], IsikYA23[186], abs-2305-19888[170], OujanaAYB22[292], WinterMMW22[396], ZhangJZL22[410], HeinzNVH22[169], PandeyS21a[294], GodetLHS20[143], NattafM20[278], MengZRZL20[262], MalapertN19[254], ArbaouiY18[12], GedikKEK18[132], EdisO11[105]	SacramentoSP20[322], BogaerdtW19[371], ParkUJR19[297], Novas19[284], BenediktSMVH18[49], ZhouGL15[416], KovacsB11[210], AkkerDH07[370]	JuvinHHL23[188], KimCMLLP23[202], Mehdizadeh-Somarin23[260], LacknerMMWW23[224], ArmstrongGOS22[14], HanenKP21[159], LacknerMMWW21[223], AbohashimaEG21[2], FanXG21[115], 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]

	Table 6: Papers by Domain and Keyword				
Domain	Keyword	High	Medium	Low	
Classification	psplib	TardivoDFMP23[354], OuelletQ18[290], cpaior-GayHS15[130], LetortCB15[230], DerrienP14[97], KameugneFSN14[195], cpaior-SchuttFS13[329], HeinzSB13[168], SchuttFSW11[332], BertholdHLMS10[52], SchuttFSW09[331]	KameugneFND23[193], BoudreaultSLQ22[67], HillTV21[175], Tesch18[360], BaptisteB18[26], FahimiOQ18[113], 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], LacknerMMWW21[223], KoehlerBFFHPSSS21[205], 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], Mehdizadeh-Somarin23[260], IsikYA23[186], GeitzGSSW22[137], LiFJZLL22[231], ZhangJZL22[410], AbreuN22[89], PohlAK22[305], abs-2211-14492[348], KovacsTKSG21[215], FanXG21[115], QinWSLS21[314], GodetLHS20[143], TangB20[352], MalapertN19[254], ParkUJR19[297], Tom19[363], ArbaouiY18[12], AstrandJZ18[21], GedikKEK18[132], MossigeGSMC17[269], ZarandiKS16[407], BurtLPS15[70], DejemeppeCS15[92], MelgarejoLS15[6], HoundjiSWD14[183], NovasH14[287], GuSS13[156], HeinzKB13[165], HeinzSB13[168], HeinzB12[164], KovacsB08[209], KovacsV06[214], ArtiouchineB05[18], ChuX05[79], KovacsV04[213], BeldiceanuC02[42], HeipckeCCS00[171], SakkoutW00[325], BeckDF97[37], Darby-DowmanLMZ97[86]	
Constraints	alldifferent	JuvinHHL23[188], KoehlerBFFHPSSS21[205], Simonis07[344]	GodetLHS20[143], BessiereHMQW14[53], KelarevaTK13[197]	WangB23[391], WangB20[390], AstrandJZ20[22], FahimiOQ18[113], MelgarejoLS15[6], AlesioNBG14[99], Cler-cqPBJ11[81], HermenierDL11[174], HachemiGR11[158], TrojetHL11[367], LopesCSM10[246]	
Constraints	alternative constraint	LaborieRSV18[222]	abs-2305-19888[170], MurinR19[273]	LacknerMMWW23[224], WinterMMW22[396], ZhangJZL22[410], HeinzNVH22[169], ArmstrongGOS21[13], HillTV21[175], HubnerGSV21[184], PandeyS21a[294], VlkHT21[387], MengZRZL20[262], SacramentoSP20[322], GalleguillosKSB19[124], GeibingerMM19[135], MalapertN19[254], EscobetPQPRA19[110], 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	alwaysin	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], LetortBC12[228], HeinzSSW12[166], 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]	
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-PSSS21[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], QuSN06[316], Hooker06[180], cp-Hooker05[179], Hooker05[178], Hooker04[177], MartinPY01[258], KorbaaYG99[206], RodosekW98[320], Simonis95[343]	

	Table 6: Papers by Domain and Keyword				
Domain	Keyword	High	Medium	Low	
Constraints	cumulative	AalianPG23[1], KameugneFND23[193], PovedaAA23[309], TardivoDFMP23[354], IsikYA23[186], LacknerMMWW23[224], BoudreaultSLQ22[67], OuelletQ22[291], ZhangJZL22[410], FetgoD22[116], PohlAK22[305], HanenKP21[159], KovacsTKSG21[215], LacknerMMWW21[223], GodetLHS20[143], GroleazNS20[154], Mercier-AubinGQ20[263], SacramentoSP20[322], WallaceY20[389], GeibingerMM19[135], MalapertN19[254], YangSS19[402], Novas19[284], abs-1911-04766[134], KameugneFGOQ18[192], OuelletQ18[290], Tesch18[360], BaptisteB18[26], FahimiOQ18[113], LaborieRSV18[222], Madi-WambaLOBM17[252], MossigeGSMC17[269], Pralet17[310], YoungFS17[403], KreterSS17[217], NattafAL17[277], SchuttS16[333], SzerediS16[351], Tesch16[359], NovaraNH16[283], EvenSH15[111], GayHS15[129], KreterSS15[216], MurphyMB15[274], VilimLS15[385], cpaior-GayHS15[130], EvenSH15a[112], GoelSHFS15[144], Kameugne15[191], LetortCB15[230], NattafAL15[276], SimoninAHL15[342], DejemeppeD14[93], DerrienP14[97], DerrienPZ14[98], GaySS14[131], KameugneFSN14[195], HeinzKB13[165], LetortCB13[229], OuelletQ13[289], SchuttFS13[330], cpaior-SchuttFS13[329], HeinzSB13[164], LetortBC12[228], SchuttCSW12[328], SerraNM12[335], LombardiM12[245], ClercqPBJ11[81], HeinzS11[167], KameugneFSN11[194], Vilim11[382], BeldiceanuCDP11[43], KelbelH11[198], SchuttFSW11[332], TrojetHL11[367], BertholdHLMS10[52], LombardiM10[244], SchuttFW10[334], SchuttFSW09[331], Vilim09[380], cpaior-Vilim09[381], abs-0907-0939[302], BeldiceanuCP08[44], KovacsB08[209], BeldiceanuCP08[44], KovacsB08[209], BeldiceanuCP08[44], KovacsB08[209], BeldiceanuCP08[44], KovacsB08[209], BeldiceanuCP08[44], KovacsB08[209], BeldiceanuCP08[44], KovacsB08[209], BeldiceanuCP08[44], Hooker06[180], Geske05[139], WolfS05[398], cp-Hooker05[179], Hooker05[178], HentenryckM04[172], Hooker05[178], HentenryckM04[172], Hooker05[178], HentenryckM04[172], Hooker05[178], HentenryckM04[174], BeldiceanuC02[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], GeitzGSSW22[137], AbreuN22[89], CampeauG22[72], HillTV21[175], KlankeBYE21[203], HubnerGSV21[184], NattafM20[278], GalleguillosKSB19[124], GedikKEK18[132], BonfiettiZLM16[64], BoothNB16[65], 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], JuvinHHL23[188], TasselGS23[355], Gur-PAE23[157], YuraszeckMCCR23[406], abs-2305-19888[170], abs-2306-05747[356], ArmstrongGOS22[14], Popovic-CGNC22[307], HeinzNVH22[169], SubulanC22[347], abs-2211-14492[348], ArmstrongGOS21[13], GeibingerMM21[136], KoehlerBFFHPSSS21[205], PandeyS21a[294], FrimodigS19[121], WikarekS19[395], abs-1902-09244[160], ArbaouiY18[12], AstrandJZ18[21], DemirovicS18[95], Laborie18a[221], ZhangW18[412], BofillCSV17[57], CappartS17[73], Gold-waserS17[146], CauwelaertDMS16[76], GilesH16[140], Madi-WambaB16[251], DejemeppeCS15[92], PesantRR15[301], SialaAH15[340], ZhouGL15[416], WangMD15[392], Bartolin-iBBLM14[35], BonfiettiLM14[63], KoschB14[208], CireCH13[80], OzturkTHO13[293], SimoninAHL12[341], BonfiettiLBM11[61], ChapadosJR11[78], EdisO11[105], GrimesH11[150], HermenierDL11[174], LombardiBMB11[242], Laborie09[220], MonetteDH09[266], ThiruvadyBME09[361], MouraSCL08a[270], LiessM08[232], RossiTHP07[321], ArtiouchineB05[18], Vilim05[379], Vilim04[378], Vilim03[377], Wolf03[397], Bartak02[33], ElkhyariGJ02[107], ElkhyariGJ02a[108], Vilim02[376], Timpe02[362], HeipckeCCS00[171], GruianK98[155], BeckDF97[37], Zhou97[415], Simonis95[343]	
Constraints	diffn	ArmstrongGOS21[13], Simonis07[344]	BeldiceanuCDP11[43]	KreterSS17[217], KreterSS15[216], TrojetHL11[367], Timpe02[362], GruianK98[155], Simonis95[343], SimonisC95[345]	

	Table 6: Papers by Domain and Keyword				
Domain	Keyword	High	Medium	Low	
Constraints	disjunctive	Bit-Monnot23[55], JuvinHHL23[188], KoehlerBFFHPSSS21[205], GodetLHS20[143], FahimiOQ18[113], LaborieRSV18[222], MossigeGSMC17[269], Pralet17[310], NattafAL17[277], FontaineMH16[117], MelgarejoLS15[6], SialaAH15[340], cpaior-GayHS15[130], GoelSHFS15[144], SchuttFS13[330], cpaior-SchuttFS13[329], OzturkTHO13[293], LombardiM12[245], BeldiceanuCDP11[43], SchuttFSW11[332], GrimesH10[149], SchuttW10[334], LopesCSM10[246], GrimesHM09[151], BeldiceanuCP08[44], ArtiguesBF04[16], HentenryckM04[172], Wolf03[397], ElkhyariGJ02a[108], BaptisteP00[29], SakkoutW00[325], RodosekW98[320], BelhadjiI98[46], PapaB98[296], BaptisteP97[28], Zhou97[415], Zhou96[414], DincbasSH90[101]	BoudreaultSLQ22[67], Astrand0F21[20], GeibingerMM21[136], AstrandJZ20[22], SacramentoSP20[322], YangSS19[402], DemirovicS18[95], KameugneFGOQ18[192], EvenSH15[111], GayHS15[129], VilimLS15[385], EvenSH15a[112], SimoninAHL15[342], GaySS14[131], KameugneFSN14[195], GrimesH11[150], HeinzS11[167], KelbelH11[198], MouraSCL08[271], MouraSCL08a[270], LiessM08[232], MonetteDD07[265], ArtiouchineB05[18], ArtiguesR00[17], SchildW00[327], Darby-DowmanLMZ97[86]	abs-2402-00459[279], EfthymiouY23[106], KameugneFND23[193], PovedaAA23[309], TardivoDFMP23[354], TasselGS23[355], LacknerMMWW23[224], abs-2306-05747[356], OuelletQ22[291], OujanaAYB22[292], MullerMKP22[272], 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], Gold-waserS17[146], YoungFS17[403], BonfiettiZLM16[64], BoothNB16[65], CauwelaertDMS16[76], GilesH16[140], Tesch16[359], NovaraNH16[283], DejemeppeCS15[92], GayHLS15[128], MurphyMB15[274], Siala15[339], KoschB14[208], GrimesIOS14[152], LetortCB13[229], OuelletQ13[289], HeinzSB13[168], IfrimOS12[185], SimoninAHL12[341], LimtanyakuIS12[237], HermenierDL11[174], KameugneFSN11[194], LahimerLH11[225], Vilim11[382], KovacsB11[210], TrojetHL11[367], BertholdHLMS10[52], CobanH10[82], LombardiM10[244], Laborie09[220], MonetteDH09[266], SchuttFSW09[331], GarridoAO09[126], WatsonB08[393], KovacsB08[209], BeldiceanuP07[45], DavenportKRSH07[88], HoeveGSL07[373], Simonis07[344], LiuJ06[240], Hooker06[178], VilimBC05[384], Hooker04[177], KovacsV04[213], Sadykov04[323], Vilim04[378], VilimBC04[383], DannaP03[85], Vilim03[377], Bartak02[33], Bartak02a[32], ElkhyariGJ02[107], HookerY02[182], Vilim02[376], Timpe02[362], VanczaM01[374], HeipckeCCS00[171], Colombani96[84], Wallace96[388], Goltz95[147], Puget95[313]	
Constraints	${ m endbe}$ for estart	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-MMWW23[224], YuraszeckMCCR23[406], ZhangJZL22[410], CampeauG22[72], LacknerMMWW21[223], HubnerGSV21[184], ZhangYW21[411], TangB20[352], BenediktMH20[48], SacramentoSP20[322], GeibingerMM19[135], MurinR19[273], ParkUJR19[297], Novas19[284], abs-1902-09244[160], abs-1911-04766[134], NishikawaSTT18[280], NishikawaSTT18a[281]	
Constraints	nooverlap	JuvinHHL23[188], IsikYA23[186], abs-2305-19888[170], PopovicCGNC22[307], HeinzNVH22[169], VlkHT21[387], LunardiBLRV20[249], QinDCS20[315], GedikKEK18[132], MelgarejoLS15[6]	KimCMLLP23[202], TasselGS23[355], LacknerMMWW23[224], abs-2306-05747[356], AbreuN22[89], PohlAK22[305], BenderWS21[47], KlankeBYE21[203], BenediktMH20[48], MengZRZL20[262], SacramentoSP20[322], MalapertN19[254], MurinR19[273], EscobetPQPRA19[110], Novas19[284], abs-1911-04766[134], ArbaouiY18[12], LaborieRSV18[222], ZhangW18[412], BoothNB16[65], NovaraNH16[283], PraletLJ15[311], GoelSHFS15[144], EdisO11[105]	AalianPG23[1], JuvinHL23[189], SquillaciPR23[346], YuraszeckMC23[405], ArmstrongGOS22[14], OujanaAYB22[292], WinterMMW22[396], ZhangJZL22[410], CampeauG22[72], LacknerMMWW21[223], GroleazNS20[154], NattafM20[278], BogaerdtW19[371], ColT19[83], GeibingerMM19[135], 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	table constraint	PapaB98[296]	Darby-DowmanLMZ97[86]	nAHL15[342], SimoninAHL12[341], SchuttFSW11[332]  PerezGSL23[299], abs-2312-13682[300], ArmstrongGOS21[13], GayHS15[129], MelgarejoLS15[6], PesantRR15[301], LimtanyakulS12[237], HermenierDL11[174], LopesCSM10[246], MouraSCL08[271], ElkhyariGJ02[107]	

	Table 6: Papers by Domain and Keyword					
Domain	Keyword	High	Medium	Low		
ProgLanguages	C++			JuvinHHL23[188],         TardivoDFMP23[354],         Popovic-CGNC22[307],           CGNC22[307],         AntuoriHHEN21[11],         QinWSLS21[314],           Mercier-AubinGQ20[263],         AstrandJZ20[22],         abs-1902-01193[8],           ArbaouiY18[12],         LaborieRSV18[222],         NattafAL17[277],           BoothNB16[65],         Tesch16[359],         NattafAL15[276],           LahimerLH11[225],         LombardiBMB11[242],         KovacsB11[210],           KovacsK11[212],         LopesCSM10[246],         ThiruvadyBME09[361],           MouraSCL08[271],         MouraSCL08a[270],         WatsonB08[393],           LiessM08[232],         DavenportKRSH07[88],         GarganiR07[125],           KeriK07[199],         KhemmoudjPB06[201],         Vilim05[379],         ArtiguesBF04[16],           Timpe02[362],         BaptisteP00[29],         PapaB98[296],		
ProgLanguages	c	KoehlerBFFHPSSS21[205]		HubnerGSV21[184], BogaerdtW19[371], LaborieRSV18[222], Laborie09[220], GarridoOS08[127]		
ProgLanguages	java		KuchcinskiW03[218]	KameugneFND23[193], TasselGS23[355], abs-2306-05747[356], OuelletQ22[291], FetgoD22[116], MullerMKP22[272], Antuori-HHEN21[11], ArmstrongGOS21[13], FanXG21[115], BarzegaranZP20[36], TangB20[352], SacramentoSP20[322], ColT19[83], FrohnerTR19[122], GeibingerMM19[135], Tom19[363], abs-1911-04766[134], KameugneFGOQ18[192], OuelletQ18[290], LaborieRSV18[222], CauwelaertDMS16[76], Madi-WambaB16[251], MurphyMB15[274], cpaior-GayHS15[130], EvenSH15a[112], LetortCB15[230], DerrienP14[97], KoschB14[208], LetortCB13[229], LetortBC12[228], RendlPHPR12[318], ClercqPBJ11[81], ZibranR11[418], SchuttW10[334], GrimesHM09[151], GarridoAO09[126], abs-0907-0939[302], GarridoOS08[127], WolinskiKG04[399], OddiPCC03[288], Wolf03[397]		
ProgLanguages	julia			*** 11 00[000]		
ProgLanguages ProgLanguages	lisp 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]	Wallace96[388]  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]		
ProgLanguages	python	KoehlerBFFHPSSS21[205]	AbreuN22[89], abs-2211-14492[348], LaborieRSV18[222]	EfthymiouY23[106], KimCMLLP23[202], Mehdizadeh-Somarin23[260], PovedaAA23[309], SquillaciPR23[346], AkramNHRSA23[7], MontemanniD23[268], MontemanniD23a[267], CampeauG22[72], FetgoD22[116], MullerMKP22[272], PohlAK22[305], BenderWS21[47], HanenKP21[159], KlankeBYE21[203], AbohashimaEG21[2], FanXG21[115], Mercier-AubinGQ20[263], LunardiBLRV20[249], BehrensLM19[40], FrimodigS19[121], FrohnerTR19[122], GalleguillosKSB19[124], abs-1901-07914[41], abs-1902-01193[8], He0GLW18[161], GoldwaserS17[146], LiuCGM17[239]		

Table 6: Papers by Domain and Keyword						
Domain	Keyword	High	Medium	Low		
CPSystems	CHIP	TrojetHL11[367], Simonis07[344], GruianK98[155], Wallace96[388], Goltz95[147], Simonis95[343], SimonisC95[345], DincbasSH90[101]	ArmstrongGOS21[13], YangSS19[402], LaborieRSV18[222], Geske05[139], PoderBS04[304], Timpe02[362], RodosekW98[320], Zhou97[415]	PrataAN23[312], KameugneFND23[193], TardivoDFMP23[354], PopovicCGNC22[307], FetgoD22[116], KlankeBYE21[203], GodetLHS20[143], abs-1902-01193[8], KameugneFGOQ18[192], BaptisteB18[26], MossigeGSMC17[269], Pralet17[310], KreterSS17[217], FontaineMH16[117], Madi-WambaB16[251], KreterSS15[216], ZhouGL15[416], LetortCB15[230], SimoninAHL15[342], DerrienPZ14[98], GrimesIOS14[152], KameugneFSN14[195], cpaior-SchuttFS13[329], Ozturk-THO13[293], LetortBC12[228], SchuttCSW12[328], SimoninAHL12[341], ClercqPBJ11[81], BeldiceanuCDP11[43], SchuttFSW11[332], SchuttW10[334], AronssonBK09[15], SchuttFSW09[331], abs-0907-0939[302], BeldiceanuCP08[44], DavenportKRSH07[88], KhemmoudjPB06[201], WolfS05[398], BeldiceanuCO2[42], BaptisteP00[29], SakkoutW00[325], KorbaaYG99[206], PapaB98[296], BaptisteP07[28], Colomban196[84]		
CPSystems	OPL	LacknerMMWW23[224], LacknerMMWW21[223], KoehlerBFFHPSSS21[205], PandeyS21a[294], QinDCS20[315], EscobetPQPRA19[110], Novas19[284], LaborieRSV18[222], NovaraNH16[283], AlesioNBG14[99], HachemiGR11[158], ZeballosQH10[409], Laborie09[220], KhayatLR06[200]	MullerMKP22[272], SubulanC22[347], MurinR19[273], Laborie18a[221], NovasH14[287], OzturkTHO13[293], SerraNM12[335], NovasH12[286], EdisO11[105], ZibranR11a[419], KelbelH11[198], TopalogluO11[364], NovasH10[285], GarganiR07[125], KrogtLPHJ07[372], Hooker06[180], QuirogaZH05[317], cp-Hooker05[179], ZeballosH05[408], VerfaillieL01[375]	IsikYA23[186], YuraszeckMCCR23[406], ArmstrongGOS22[14], GeitzGSSW22[137], LiFJZLL22[231], OujanaAYB22[292], MengZRZL20[262], abs-1902-09244[160], ZhangW18[412], CappartS17[73], HechingH16[163], GoelSHFS15[144], CireCH13[80], HeinzB12[164], ZibranR11[418], BartakS11[34], CobanH10[82], SunLYL10[349], Limtanyakul07[236], RossiTHP07[321], Hooker05[178], Hooker04[177], RodosekW98[320], Wallace96[388], DincbasSH90[101]		
CPSystems	OZ		MaraveliasG04[257]	KorbaaYG99[206]		
CPSystems	Z3	KoehlerBFFHPSSS21[205]	VlkHT21[387]	ZhangW18[412], BofillCSV17[57], Zhou96[414]		
CPSystems	choco	TasselGS23[355], abs-2306-05747[356], LetortCB15[230], LetortCB13[229], OuelletQ13[289], LetortBC12[228], GrimesHM09[151], GarridoAO09[126], abs-0907-0939[302], GarridoOS08[127]	KameugneFND23[193], FetgoD22[116], MullerMKP22[272], AntuoriHHEN21[11], LiuLH19[238], KameugneFGOQ18[192], FahimiOQ18[113], 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], MurphyMB15[274], EvenSH15a[112], BessiereHMQW14[53], RossiTHP07[321]		
CPSystems	chuffed	PovedaAA23[309], LacknerMMWW23[224], BoudreaultSLQ22[67], MullerMKP22[272], ArmstrongGOS21[13], GeibingerMM21[136], LacknerMMWW21[223], KoehlerBFFHPSS21[205], GodetLHS20[143], WallaceY20[389], abs-1911-04766[134], YoungFS17[403], KreterSS17[217], SzerediS16[351], KreterSS15[216]		SchuttS16[333]		
CPSystems	claire	BaptisteP00[29]	BaptisteP97[28]	HanenKP21[159], PapaB98[296]		

	Table 6: Papers by Domain and Keyword					
Domain	Keyword	High	Medium	Low		
CPSystems	cplex	WinterMMW22[396], MullerMKP22[272], SubulanC22[347], GeibingerKKMMW21[133], HubnerGSV21[184], KoehlerBFFHPSS21[205], PandeyS21a[294], LunardiBLRV20[249], MengZRZL20[262], QinDCS20[315], SacramentoSP20[322], GeibingerMM19[135], MurinR19[273], abs-1911-04766[134], NishikawaSTT18[280], NishikawaSTT18a[281], LaborieRSV18[222], KreterSS17[217], NovaraNH16[283], KoschB14[208], CireCH13[80], HeinzSB13[168], Mason01[259], Darby-DowmanLMZ97[86]	Mehdizadeh-Somarin23[260], IsikYA23[186], LacknerMMWW23[224], CampeauG22[72], ArmstrongGOS21[13], KovacsTKSG21[215], LacknerMMWW21[223], QinWSLS21[314], NattafM20[278], WallaceY20[389], MalapertN19[254], Novas19[284], abs-1902-09244[160], HechingH16[163], BofillGSV15[59], PraletLJ15[311], VilimLS15[385], NattafAL15[276], BofillEGPSV14[58], GrimesIOS14[152], HeinzKB13[165], BillautHL12[54], HeinzB12[164], SerraNM12[335], LimtanyakulS12[237], EdisO11[105], GrimesH11[150], KelbelH11[198], AronssonBK09[15], Hooker05[178], Hooker04[177], DannaP03[85], SakkoutW00[325], RodosekW98[320]	AalianPG23[1], JuvinHL23[189], PovedaAA23[309], Squil-laciPR23[346], GurPAE23[157], YuraszeckMCCR23[406], PopovicCGNC22[307], AbreuN22[89], PohlAK22[305], abs-2211-14492[348], GeibingerMM21[136], KlankeBYE21[203], FanXG21[115], VlkHT21[387], ZhangYW21[411], TangB20[352], BogaerdtW19[371], FrimodigS19[121], EscobetPQPRA19[110], ArbaouiY18[12], GedikKEK18[132], PourDERB18[308], ZhangW18[412], Pralet17[310], NattafAL17[277], BoothNB16[65], GilesH16[140], SzerediS16[351], BurtLPS15[70], KreterSS15[216], MelgarejoLS15[6], GoelSHFS15[144], WangMD15[392], AlesioNBG14[99], DoulabiRP14[103], KelarevaTK13[197], OzturkTHO13[293], HeinzSSW12[166], HeinzS11[167], ZibranR11[418], ZibranR11[419], HachemiGR11[158], KovacsK11[212], TopalogluO11[364], BertholdHLMS10[52], CobanH10[82], Davenport10[87], SunLYL10[349], ZeballosQH10[409], AkkerDH07[370], DavenportKRSH07[88], HoeveGSL07[373], BeniniBGM06[50], Hooker06[180], KhayatLR06[200], cp-Hooker05[179], Timpe02[362], VerfaillieL01[375], BensanaLV99[51]		
CPSystems	сро	Bit-Monnot23[55], JuvinHHL23[188], LacknerMMWW23[224], WinterMMW22[396], ArmstrongGOS21[13], LacknerMMWW21[223], GroleazNS20[154], NattafM20[278], SacramentoSP20[322], ColT19[83], GeibingerMM19[135], MalapertN19[254], LaborieRSV18[222], KreterSS17[217], PraletLJ15[311], GoelSHFS15[144], Laborie09[220]	AalianPG23[1], abs-1911-04766[134]	JuvinHL23[189], PovedaAA23[309], OujanaAYB22[292], GeibingerMM21[136], TangB20[352], Laborie18a[221], Pralet17[310], VilimLS15[385], Vilim09[380], GarridoAO09[126], GarridoOS08[127]		
CPSystems	eclipse	$ m Rodosek \dot{W}98 [ ar{3}20 ]$	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], AntuoriHHEN21[11], Astrand0F21[20], GeibingerKKMMW21[133], FrohnerTR19[122], GeibingerMM19[135], abs-1911-04766[134], LaborieRSV18[222], BurtLPS15[70], BofillEGPSV14[58], KameugneFSN11[194], KovacsK11[212], ThiruvadyBME09[361]	ArmstrongGOS21[13], WessenCS20[394], MengZRZL20[262], WallaceY20[389], FrimodigS19[121], YangSS19[402], AstrandJZ18[21], GoldwaserS17[146], PesantRR15[301], MonetteDD07[265]		
CPSystems	gurobi	WangB23[391], LacknerMMWW23[224], WinterMMW22[396], GeibingerKKMMW21[133], KovacsTKSG21[215], LacknerMMWW21[223], KoehlerBFFHPSSS21[205], WangB20[390], WallaceY20[389], FrohnerTR19[122]	VlkHT21[387], GoldwaserS17[146], FontaineMH16[117]	KimCMLLP23[202], MontemanniD23[268], abs-2305-19888[170], HeinzNVH22[169], PohlAK22[305], KlankeBYE21[203], AbohashimaEG21[2], FanXG21[115], HubnerGSV21[184], BenediktMH20[48], MengZRZL20[262], BenediktSMVH18[49], DemirovicS18[95], He0GLW18[161], 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], LahimerLH11[225], HachemiGR11[158], KovacsB11[210], SchuttFSW11[332], LopesCSM10[246], NovasH10[285], cpaior-Vilim09[381], MouraSCL08[271], MouraSCL08a[270], KovacsB08[209], HoeveGSL07[373], Simonis07[344], KovacsV06[214], Hooker06[180], ArtiouchineB05[18], QuirogaZH05[317], WuBB05[401], cp-Hooker05[179], Hooker05[178], ArtiguesBF04[16], Hooker04[177], KovacsV04[213], DannaP03[85], Bartak02a[32], BaptisteP00[29], Zhou97[415]		

	Table 6: Papers 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], MouraSCL08[271], MouraSCL08a[270], KovacsB08[209], BeniniBGM06[50], GomesHS06[148], QuirogaZH05[317], ZeballosH05[408], ArtiguesBF04[16], DannaP03[85], ValleMGT03[369], MartinPY01[258], SchildW00[327], KorbaaYG99[206], BensanaLV99[51], PapaB98[296], Wallace96[388]		
CPSystems	mini zinc	TardivoDFMP23[354], LacknerMMWW23[224], BoudreaultSLQ22[67], MullerMKP22[272], ArmstrongGOS21[13], LacknerMMWW21[223], KoehlerBFFHPSSS21[205], Mercier-AubinGQ20[263], WallaceY20[389], ColT19[83], FrohnerTR19[122], GeibingerMM19[135], 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], BehrensLM19[40], FrimodigS19[121], abs-1901-07914[41], DemirovicS18[95], FontaineMH16[117], SchuttS16[333], BurtLPS15[70], SchuttFS13[330], HeinzSB13[168]		
CPSystems	mistral	JuvinHHL23[188], GrimesHM09[151]	Bit-Monnot23[55], BillautHL12[54]	SialaAH15[340]		
CPSystems	or tools	abs-2402-00459[279], LacknerMMWW23[224], MullerMKP22[272], abs-2211-14492[348], KovacsTKSG21[215], LacknerMMWW21[223], KoehlerBFFHPSSS21[205], ColT19[83], GayHS15[129]	EfthymiouY23[106], BoudreaultSLQ22[67], GeibingerKKMMW21[133], BarzegaranZP20[36], LiuCGM17[239]	Bit-Monnot23[55], KimCMLLP23[202], AkramNHRSA23[7], MontemanniD23[268], MontemanniD23a[267], Klanke-BYE21[203], GroleazNS20[154], MengZRZL20[262], BehrensLM19[40], GalleguillosKSB19[124], YangSS19[402], abs-1901-07914[41], PourDERB18[308], BonfiettiZLM16[64], ZhouGL15[416], LombardiM12[245]		
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]		
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		$\mathrm{Timpe}02[362]$	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], LacknerMMWW21[223], FanXG21[115], 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]		

	Table 6: Papers by Domain and Keyword					
Domain	Keyword	High	Medium	Low		
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]	KimCMLLP23[202], İsikYA23[186], LacknerMMWW23[224], Ou- janaAYB22[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]		
Benchmarks	benchmark	Bit-Monnot23[55], JuvinHHL23[188], PovedaAA23[309], TardivoDFMP23[354], TasselGS23[355], IsikYA23[186], LacknerMMWW23[224], YuraszeckMCCR23[406], abs-2306-05747[356], BoudreaultSLQ22[67], LiFJZLL22[231], OuelletQ22[291], WinterMMW22[396], ZhangJZL22[410], AbreuN22[89], MullerMKP22[272], abs-2211-14492[348], GeibingerMM21[136], LacknerMMWW21[223], FanXG21[115], KoehlerBFFHPSSS21[205], PandeyS21a[294], ZhangYW21[411], GodetLHS20[143], WallaceY20[389], ColT19[83], FrimodigS19[121], LiuLH19[238], abs-1902-09244[160], abs-1911-04766[134], DemirovicS18[95], Laborie18a[221], OuelletQ18[290], GedikKEK18[132], LaborieRSV18[222], KreterSS17[217], BurtLPS15[70], KreterSS15[216], MelgarejoLS15[6], VilimLS15[385], BonfiettiLM14[63], cpaior-SchuttFS13[329], HeinzSB13[168], GrimesH11[150], SchuttFSW11[332], SchuttFSW09[331], WatsonB08[393], Wolf03[397], KuchcinskiW03[218], HeipckeCCS00[171], SakkoutW00[325], BensanaLV99[51], BeckDF97[37]	abs-2402-00459[279], KameugneFND23[193], YuraszeckMC23[405], AkramNHRSA23[7], MontemanniD23a[267], abs-2305-19888[170], OujanaAYB22[292], FetgoD22[116], HeinzNVH22[169], KovacsTKSG21[215], GroleazNS20[154], BenediktMH20[48], MengZRZL20[262], SacramentoSP20[322], GeibingerMM19[135], Novas19[284], ArbaouiY18[12], NishikawaSTT18[280], FahimiOQ18[113], BofillCSV17[57], MossigeGSMC17[269], BonfiettiZLM16[64], SchuttS16[333], SzerediS16[351], NovaraNH16[283], DejemeppeCS15[92], LombardiBM15[241], SialaAH15[340], cpaior-GayHS15[130], LetortCB15[230], KoschB14[208], KameugneFSN14[195], LetortCB13[229], OuelletQ13[289], SchuttCSW12[328], LimtanyakulS12[237], ClercqPBJ11[81], KameugneFSN11[194], BeldiceanuCDP11[43], KelbelH11[198], GrimesH10[149], GrimesHM09[151], MonetteDH09[266], BeldiceanuCP08[44], MonetteDDO7[265], HentenryckM04[172], KovacsV04[213], VilimBC04[383], DannaP03[85], OddiPCC03[288], Bartak02a[32], GruianK98[155], Zhou97[415]	PrataAN23[312], EfthymiouY23[106], KimCMLLP23[202], SquillaciPR23[346], MontemanniD23[268], ArmstrongGOS22[14], PohlAK22[305], SubulanC22[347], ArmstrongGOS21[13], Astrand0F21[20], KlankeBYE21[203], HubnerGSV21[184], VlkHT21[387], NattafM20[278], AstrandJZ20[22], Lunardi-BLRV20[249], QinDCS20[315], BogaerdtW19[371], FrohnerTR19[122], MalapertN19[254], MurinR19[273], abs-1901-07914[41], KameugneFGOQ18[192], NishikawaSTT18a[281], PourDERB18[308], ZhangW18[412], GelainPRVW17[138], Hooker17[181], Pralet17[310], YoungFS17[403], Cauwelaert-DMS16[76], FontaineMH16[117], Madi-WambaB16[251], GayHLS15[128], EimBTBB15[235], Siala15[339], AlesioNBG14[99], BessiereHMQW14[53], DerrienPZ14[98], NovasH14[287], GuSS13[156], SchuttFS13[330], BonfiettLBM12[62], LetortBC12[228], RendlPHPR12[318], SerraNM12[335], LombardiM12[245], BonfiettiLBM11[61], HeinzS11[167], LahimerLH11[225], LombardiBMB11[242], Vilim11[382], KovacsB11[210], SchausHMCMD11[326], LombardiM10[244], SchuttW10[334], LopesCSM10[246], ZeballosQH10[409], Laborie09[220], GarridoAO09[126], LauLN08[226], MouraSCL08a[270], KovacsB08[209], LiessM08[232], HoeveGSL07[373], KovacsV06[214], KhayatLR06[200], FrankK05[119], Vilim05[379], WuBB05[401], VilimBC05[384], ArtiguesBF04[16], Vilim04[378], BeldiceanuC02[42], ElkhyariGJ02a[108], KamarainenS02[190], BaptisteP00[29], RodosekW98[320], PapaB98[296], BaptisteP97[28], Caseau97[75], Darby-DowmanLMZ97[86], Goltz95[147], Puget95[313], ErtlK91[109]		
Benchmarks	bitbucket		TardivoDFMP23[354]	He0GLW18[161], CappartS17[73], CauwelaertDMS16[76], DejemeppeCS15[92], GayHLS15[128], GayHS15[129], 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], Astrand0F21[20], GeibingerMM21[136], HanenKP21[159], AbohashimaEG21[2], 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]		

	Table 6: Papers by Domain and Keyword					
Domain	Keyword	High	Medium	Low		
Benchmarks	github	KoehlerBFFHPSSS21[205]	PovedaAA23[309], TardivoDFMP23[354], BoudreaultSLQ22[67], GodetLHS20[143], BenediktMH20[48], 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], OuelletQ22[291], MullerMKP22[272], GeibingerMM21[136], KovacsTKSG21[215], AbohashimaEG21[2], VlkHT21[387], WangB20[390], BehrensLM19[40], ColT19[83], 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]		
Benchmarks	http://	YuraszeckMC23[405], IsikYA23[186], 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], DemirovicS18[95], GedikKEK18[132], LaborieRSV18[222], PourDERB18[308], ShinBBHO18[338], BofillCSV17[57], LimHTB16[234], NovaraNH16[283], BofillGSV15[59], BurtLPS15[70], LimBTBB15[235], MurphyMB15[274], SialaAH15[340], LetortCB15[230], 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], abs-2402-00459[279], JuvinHHL23[188], WangB23[391], Caballero23[71], LacknerMMWW23[224], MontemanniD23a[267], abs-2305-19888[170], GeitzGSSW22[137], AbreuN22[89], PohlAK22[305], AntuoriHHEN21[11], GeibingerKKMMW21[133], KovacsTKSG21[215], HubnerGSV21[184], KoehlerBFFHPSSS21[205], VlkHT21[387], BarzegaranZP20[36], Mercier-AubinGQ20[263], NattafM20[278], WangB20[390], AstrandJZ20[22], WallaceY20[389], BehrensLM19[40], GeibingerMM19[135], MalapertN19[254], EscobetPQPRA19[110], abs-1901-07914[41], abs-1911-04766[134], KameugneFGOQ18[192], Laborie18a[221], ZhangW18[412], GelainPRVW17[138], GoldwaserS17[146], YoungFS17[403], KreterSS17[217], NattafAL17[277], CauwelaertDMS16[76], Madi-WambaB16[251], SchuttS16[333], SzerediS16[351], Tesch16[359], DejemeppeCS15[92], EvenSH15[111], GayHS15[129], KreterSS15[216], MelgarejoLS15[6], PesantRR15[301], ZhouGL15[416], EvenSH15a[112], GoelSHFS15[144], Kameugne15[191], NattafAL15[276], Siala15[339], AlesioNBG14[99], BessiereHMQW14[53], BonfettiLM14[63], DerrienPZ14[98], HoundjiSWD14[183], NovasH14[287], OuelletQ13[289], SchuttFS13[330], HeinzSB13[168], OzturkTHO13[293], BonfiettiLBM12[62], RendlPHPR12[318], SchuttCSW12[328], HeinzSSW12[166], LimtanyakulS12[237], BonfiettiLBM11[61], ClercqPBJ11[81], GrimesH11[150], HeinzS11[167], HermenierDL11[174], KameugneFSN11[194], LahimerLH11[225], Vilim1[382], BartakS11[34], BeldiceanuCDP11[43], KelbelH11[198], KovacsK11[212], SchausHMCMD11[326], TopalogluO11[364], TrojetHL11[367], BertholdHLMS10[52], SunLYL10[349], LopesCSM10[246], NovasH10[285], 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], AbrilSB05[3], ArtiouchineB05[18], DilkinaDH05[100], FortinZDF05[118], Geske05[139], VilimBC05[384], ZeballosH05[408], KovacsV04[213], Vilim04[378], VilimBC04[383], Bartak02a[32], ElkhyariGJ02a[108], HookerY02[182], KamarainenS02[190], Muslace96[388]		

	Table 6: Papers by Domain and Keyword					
Domain	Keyword	High	Medium	Low		
Benchmarks	https://	EfthymiouY23[106], PovedaAA23[309], TardivoDFMP23[354], GurPAE23[157], IsikYA23[186], MontemanniD23[268], abs-2305-19888[170], ArmstrongGOS22[14], BoudreaultsLQ22[67], GeitzGSSW22[137], OuelletQ22[291], CampeauG22[72], HeinzNVH22[169], MullerMKP22[272], Astrand0F21[20], BenderWS21[47], GeibingerKKMMW21[133], HanenKP21[159], HillTV21[175], KlankeBYE21[203], HubnerGSV21[184], KoehlerBFFHPSS21[205], GroleazNS20[154], Mercier-AubinGQ20[263], NattafM20[278], WessenCS20[394], BenediktMH20[48], LunardiBLRV20[249], BogaerdtW19[371], ColT19[83], GalleguillosKSB19[124], GeibingerMM19[135], MalapertN19[254], MurinR19[273], YangSS19[402], DemirovicS18[95], KameugneFGOQ18[192], Laborie18a[221], OuelletQ18[290], Tesch18[360]	abs-2402-00459[279], KameugneFND23[193], KimCMLLP23[202], Mehdizadeh-Somarin23[260], SquillaciPR23[346], YuraszeckMC23[405], AkramNHRSA23[7], LacknerMMWW23[224], MontemanniD23a[267], YuraszeckMCCR23[406], WinterMMW22[396], AbreuN22[89], FetgoD22[116], PohlAK22[305], SubulanC22[347], KovacsTKSG21[215], TangB20[352], SacramentoSP20[322], WallaceY20[389], FrimodigS19[121], FrohnerTR19[122], LiuLH19[238], abs-1911-04766[134], ArbaouiY18[12], AstrandJZ18[21], BenediktSMVH18[49], He0GLW18[161], GedikKEK18[132], LiuCGM17[239], YoungFS17[403]	PrataAN23[312], Bit-Monnot23[55], JuvinHHL23[188], JuvinHL23[189], TasselGS23[355], Caballero23[71], abs-2306-05747[356], OujanaAYB22[292], PopovicCGNC22[307], abs-2211-14492[348], AntuoriHHEN21[11], ArmstrongGOS21[13], LacknerMMWW21[223], AbohashimaEG21[2], FanXG21[115], PandeyS21a[294], QinWSLS21[314], VlkHT21[387], ZhangYW21[411], BarzegaranZP20[36], GodetLHS20[143], WangB20[390], AstrandJZ20[22], MengZRZL20[262], QinDCS20[315], BehrensLM19[40], ParkUJR19[297], EscobetPQPRA19[110], Novas19[284], abs-1901-07914[41], abs-1902-09244[160], NishikawaSTT18[280], NishikawaSTT18a[281], FahimiOQ18[113], LaborieRSV18[222], ShinBBHO18[338], CappartS17[73], GoldwaserS17[146], BonfiettiZLM16[64], CauwelaertDMS16[76], FontaineMH16[117], Madi-WambaB16[251], DejemeppeCS15[92], GayHS15[129], cpaior-GayHS15[130], WangMD15[392], DejemeppeD14[93], HoundjiSWD14[183], SunLYL10[349]		
Benchmarks	industrial instance		${\bf BonfiettiZLM16[64]}$	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	BoudreaultSLQ22[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], WangB23[391], LacknerMMWW23[224], LetortCB15[230], KelbelH11[198]	Mehdizadeh-Somarin23[260], OuelletQ22[291], MullerMKP22[272], abs-2211-14492[348], HanenKP21[159], KlankeBYE21[203], VlkHT21[387], BenediktMH20[48], LunardiBLRV20[249], BenediktSMVH18[49], FahimiOQ18[113], CappartS17[73], Hooker17[181], MossigeGSMC17[269], Madi-WambaB16[251], DerrienP14[97], DerrienPZ14[98], KameugneFSN14[195], LetortCB13[229], BillautHL12[54], LetortBC12[228], LimtanyakulS12[237], BartakS11[34], Hooker06[180], ArtiouchineB05[18], Hooker05[178], Hooker04[177], BeldiceanuC02[42]		

	Table 6: Papers by Domain and Keyword					
Domain	Keyword	High	Medium	Low		
Benchmarks	real life	GurPAE23[157], WinterMMW22[396], SubulanC22[347], 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], PovedaAA23[309], IsikYA23[186], BoudreaultSLQ22[67], GeitzGSSW22[137], CampeauG22[72], GeibingerMM21[136], GodetLHS20[143], AstrandJZ20[22], SacramentoSP20[322], WallaceY20[389], GeibingerMM19[135], MurinR19[273], Laborie18a[221], NishikawaSTT18a[281], CappartS17[73], GelainPRVW17[138], CauwelaertDMS16[76], EvenSH15[111], EvenSH15a[112], BessiereHMQW14[53], GrimesIOS14[152], OzturkTHO13[293], IfrimOS12[185], LombardiBMB11[242], BartakS11[34], TopalogluO11[364], AronssonBK09[15], GarganiR07[125], Limtanyakul07[236], BeniniBGM06[50], GomesHS06[148], KhayatLR06[200], Geske05[139], KovacsEKV05[211], VilimBC05[384], KovacsV04[213], VilimBC04[383], ValleMGT03[369], BartakO2[33], BeldiceanuC02[42], ElkhyariGJ02a[108], VanczaM01[374], BelhadjiI98[46], Darby-DowmanLMZ97[86], Touraivane95[366]		
Benchmarks	real world	abs-2305-19888[170], HeinzNVH22[169], GeibingerMM21[136], KoehlerBFFHPSSS21[205], FrohnerTR19[122], GeibingerMM19[135], abs-1902-09244[160], abs-1911-04766[134], EvenSH15[111], MelgarejoLS15[6], EvenSH15a[112], RendlPHPR12[318], MouraSCL08a[270]	PrataAN23[312], AalianPG23[1], TasselGS23[355], WangB23[391], IsikYA23[186], YuraszeckMCCR23[406], abs-2306-05747[356], OujanaAYB22[292], MullerMKP22[272], ArmstrongGOS21[13], TangB20[352], WessenCS20[394], AstrandJZ20[22], WallaceY20[389], 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], Kim-CMLLP23[202], PerezGSL23[299], PovedaAA23[309], TardivoDFMP23[354], abs-2312-13682[300], ArmstrongGOS22[14], BoudreaultSLQ22[67], GeitzGSSW22[137], AbreuN22[89], CampeauG22[72], FetgoD22[116], PohlAK22[305], SubulanC22[347], Astrand0F21[20], GeibingerKKMMW21[133], HillTV21[175], KovacsTKSG21[215], AbohashimaEG21[2], 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], ZhouGL15[416], cpaior-GayHS15[130], WangMD15[392], BonfiettiLM14[63], DerrienPZ14[98], GrimeslOS14[152], SerraNM12[335], HeinzSSW12[166], SchutFSW11[332], TrojetHL11[367], LombardiM10[244], ZeballosQH10[409], AronssonBK09[15], Laborie09[220], LombardiM09[243], SchuttFSW09[331], abs-0907-0939[302], BarlattCG08[31], LauLN08[226], WatsonB08[393], GarridoOS08[127], KrogtLPHJ07[372], KhemmoudjPB06[201], WolfS05[398], BeckDF97[37], Darby-DowmanLMZ97[86], ErtlK91[109]		
Benchmarks	supplementary material		MontemanniD23[268]	JuvinHHL23[188], TasselGS23[355], abs-2306-05747[356], BoudreaultSLQ22[67], WinterMMW22[396], AntuoriH- HEN21[11], ArmstrongGOS21[13], KovacsTKSG21[215], Lackn- erMMWW21[223], MengZRZL20[262]		
Benchmarks	zenodo	LacknerMMWW23[224], SacramentoSP20[322]		KimCMLLP23[202], WinterMMW22[396], ArmstrongGOS21[13]		
Algorithms	bi partite matching	The Desire of the Desire of	O. H. Odoloool, W. H. Hiddigool, D. Booloool	Simonis07[344], Kumar03[219]		
Algorithms	edge finder	KameugneFND23[193], FetgoD22[116], KameugneFSN14[195], BaptisteP00[29]	OuelletQ13[289], KelbelH11[198], PapaB98[296]	BaptisteBl8[26], BonfiettiZLM16[64], GuSS13[156], SchuttFSW11[332], SchuttFSW09[331], ValleMGT03[369], SakkoutW00[325], BaptisteP97[28], Zhou97[415]		

	Table 6: Papers by Domain and Keyword					
Domain	Keyword	High	Medium	Low		
Algorithms	gorithms edge finding  JuvinHHL23[188], KameugneF TardivoDFMP23[354], Ouellett FetgoD22[116], YangSS19[402] FahimioQ18[113], KreterSS17 cpaior-GayHS15[130], Kameug KameugneFSN14[195], Ouellet cpaior-SchuttFS13[329], Clercc KameugneFSN11[194], Vilim1 SchuttFSW11[332], Vilim09[38 ArtiouchineB05[18], Hooker05[ VilimBC05[384], VilimBC04[38 BaptisteP00[29], PapaB98[296] BeckDF97[37]		BoudreaultSLQ22[67], Tesch18[360], LaborieRSV18[222], 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], GuSS13[156], HeinzSB13[168], Ozturk-THO13[293], LimtanyakulS12[237], GrimesH11[150], BeldiceanuCDP11[43], KelbelH11[198], KovacsB11[210], GrimesH10[149], SchuttW10[334], GrimesHM09[151], cpaior-Vilim09[381], abs-0907-0939[302], 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	OuelletQ22[291], FetgoD22[116], HanenKP21[159], OuelletQ18[290], Tesch18[360], NattafAL17[277], Tesch16[359], cpaior-GayHS15[130], NattafAL15[276], DerrienP14[97], cpaior-SchuttFS13[329], LimtanyakulS12[237], HeinzS11[167], Vilim11[382]	KameugneFND23[193], KameugneFGOQ18[192], SchuttFS13[330]	TardivoDFMP23[354], IsikYA23[186], BoudreaultSLQ22[67], ArmstrongGOS21[13], YangSS19[402], Laborie18a[221], BofillCSV17[57], KameugneFSN14[195], LetortCB13[229], OuelletQ13[289], LombardiM12[245], ClercqPBJ11[81], LahimerLH11[225], BeldiceanuCDP11[43], Vilim09[380], cpaior-Vilim09[381], abs-0907-0939[302], Limtanyakul07[236], WolfS05[398], BaptisteP00[29], PapaB98[296]		
Algorithms	max flow		LopesCSM10[246], MouraSCL08[271], Muscettola02[275]	FanXG21[115], Kumar03[219]		
Algorithms	maximum matching		Kumar03[219]			
Algorithms	not first	KameugneFND23[193], KameugneFGOQ18[192], FahimiOQ18[113], 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], KameugneFGOQ18[192], OuelletQ18[290], FahimiOQ18[113], 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], Vilim11[382], SchuttFSW11[332], 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],       WolfS05[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], GeitzGSSW22[137], OuelletQ22[291], FetgoD22[116], KameugneFGOQ18[192], Madi-WambaLOBM17[252], EvenSH15[111], EvenSH15a[112], DerrienP14[97], GaySS14[131], OuelletQ13[289], Vilim11[382], BeldiceanuCDP11[43], BeldiceanuCP08[44], KovacsB08[209], Simonis07[344], VilimBC05[384], Vilim04[378]		
Algorithms	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], BofillGSV15[59], GayHS15[129], Vilim11[382], Bartak02[33]	PrataAN23[312], KameugneFND23[193], LacknerMMWW23[224], FetgoD22[116], GeibingerMM21[136], GodetLHS20[143], GeibingerMM19[135], LiuLH19[238], abs-1911-04766[134], AstrandJZ18[21], KameugneFGOQ18[192], BaptisteB18[26], YoungFS17[403], Tesch16[359], ZarandiKS16[407], GayHLS15[128], LimBTBB15[235], VilimLS15[385], WangMD15[392], BofillEGPSV14[58], KameugneFSN14[195], GuSS13[156], SchuttFS13[330], HeinzSB13[168], BonfietiLBM12[62], ZhangLS12[413], ChapadosJR11[78], ClercqPBJ11[81], KameugneFSN11[194], ZibranR11a[419], TopalogluO11[364], GrimesH10[149], Simonis07[344], Tsang03[368], Bartak02a[32], SchildW00[327]		

## 7 Examples from Books and Courses

### 8 Benchmark Sets

### 8.1 CSPLib

Table 7: 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.