CP Papers on Scheduling

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1 Introduction

Table 1: Key Overview

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2 Conference Paper List

2.1 Papers from bibtex

Table 2: PAPERs from bibtex (Total 283)

Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
AalianPG23 AalianPG23	Y. Aalian, G. Pesant, M. Gamache	Optimization of Short-Term Underground Mine Planning Using Constraint Programming	Yes	[1]	2023	CP 2023	16	284	561
Bit-Monnot23 Bit-Monnot23	A. Bit-Monnot	Enhancing Hybrid CP-SAT Search for Disjunctive Scheduling	Yes	[63]	2023	ECAI 2023	8	320	562
EfthymiouY23 EfthymiouY23	N. Efthymiou, N. Yorke-Smith	Predicting the Optimal Period for Cyclic Hoist Scheduling Problems	Yes	[126]	2023	CPAIOR 2023	16	360	563
JuvinHHL23 JuvinHHL23	C. Juvin, E. Hebrard, L. Houssin, P. Lopez	An Efficient Constraint Programming Approach to Preemptive Job Shop Scheduling	Yes	[217]	2023	CP 2023	16	419	564
JuvinHL23 JuvinHL23	C. Juvin, L. Houssin, P. Lopez	Constraint Programming for the Robust Two-Machine Flow-Shop Scheduling Problem with Budgeted Uncertainty	Yes	[218]	2023	CPAIOR 2023	16	420	565
KameugneFND23 KameugneFND23	R. Kameugne, Séverine Betmbe Fetgo, T. Noulamo, Clémentin Tayou Djamégni	Horizontally Elastic Edge Finder Rule for Cumulative Constraint Based on Slack and Density	Yes	[222]	2023	CP 2023	17	423	566
KimCMLLP23 KimCMLLP23	D. Kim, Y. Choi, K. Moon, M. Lee, K. Lee, Michael L. Pinedo	Iterated Greedy Constraint Programming for Scheduling Steelmaking Continuous Casting	Yes	[231]	2023	CPAIOR 2023	16	428	567
Mehdizadeh-Somarin23 Mehdizadeh-Somarin23	Z. Mehdizadeh-Somarin, R. Tavakkoli-Moghaddam, M. Rohaninejad, Z. Hanzálek, Behdin Vahedi Nouri	A Constraint Programming Model for a Reconfigurable Job Shop Scheduling Problem with Machine Availability	Yes	[295]	2023	APMS 2023	14	467	568
PerezGSL23 PerezGSL23	G. Perez, G. Glorian, W. Suijlen, A. Lallouet	A Constraint Programming Model for Scheduling the Unloading of Trains in Ports	Yes	[339]	2023	ICTAI 2023	7	490	569
PovedaAA23 PovedaAA23	G. Povéda, N. Álvarez, C. Artigues	Partially Preemptive Multi Skill/Mode Resource-Constrained Project Scheduling with Generalized Precedence Relations and Calendars	Yes	[349]	2023	CP 2023	21	494	570
SquillaciPR23 SquillaciPR23	S. Squillaci, C. Pralet, S. Roussel	Scheduling Complex Observation Requests for a Constellation of Satellites: Large Neighborhood Search Approaches	Yes	[390]	2023	CPAIOR 2023	17	516	571
TardivoDFMP23 TardivoDFMP23	F. Tardivo, A. Dovier, A. Formisano, L. Michel, E. Pontelli	Constraint Propagation on GPU: A Case Study for the Cumulative Constraint	Yes	[399]	2023	CPAIOR 2023	18	521	572
TasselGS23 TasselGS23	P. Tassel, M. Gebser, K. Schekotihin	An End-to-End Reinforcement Learning Approach for Job-Shop Scheduling Problems Based on Constraint Programming	Yes	[400]	2023	ICAPS 2023	9	522	573
WangB23 WangB23	R. Wang, N. Barnier	Dynamic All-Different and Maximal Cliques Constraints for Fixed Job Scheduling	Yes	[437]	2023	ICTAI 2023	8	543	574
YuraszeckMC23 YuraszeckMC23	F. Yuraszeck, G. Mejía, D. Canut-de-Bon	A competitive constraint programming approach for the group shop scheduling problem	Yes	[451]	2023	ANT 2023	6	553	575
ArmstrongGOS22 ArmstrongGOS22	E. Armstrong, M. Garraffa, B. O'Sullivan, H. Simonis	A Two-Phase Hybrid Approach for the Hybrid Flexible Flowshop with Transportation Times	Yes	[15]	2022	CPAIOR 2022	13	293	576
BoudreaultSLQ22 BoudreaultSLQ22	R. Boudreault, V. Simard, D. Lafond, C. Quimper	A Constraint Programming Approach to Ship Refit Project Scheduling	Yes	[80]	2022	CP 2022	16	332	577
GeitzGSSW22 GeitzGSSW22	M. Geitz, C. Grozea, W. Steigerwald, R. Stöhr, A. Wolf	Solving the Extended Job Shop Scheduling Problem with AGVs - Classical and Quantum Approaches	Yes	[161]	2022	CPAIOR 2022	18	381	578
JungblutK22 JungblutK22	P. Jungblut, D. Kranzlmüller	Optimal Schedules for High-Level Programming Environments on FPGAs with Constraint Programming	Yes	[216]	2022	IPDPS 2022	4	418	579
LiFJZLL22 LiFJZLL22	X. Li, J. Fu, Z. Jia, Z. Zhao, S. Li, S. Liu	Constraint Programming for a Novel Integrated Optimization of Blocking Job Shop Scheduling and Variable-Speed Transfer Robot Assignment	Yes	[262]	2022	ICNSC 2022	6	448	580
LuoB22 LuoB22	Yiqing L. Luo, J. Christopher Beck	Packing by Scheduling: Using Constraint Programming to Solve a Complex 2D Cutting Stock Problem	Yes	[285]	2022	CPAIOR 2022	17	461	581
OuelletQ22 OuelletQ22	Y. Ouellet, C. Quimper	A MinCumulative Resource Constraint	Yes	[331]	2022	CPAIOR 2022	17	486	582

Table 2: PAPERs from bibtex (Total 283)

Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
OujanaAYB22 OujanaAYB22	S. Oujana, L. Amodeo, F. Yalaoui, D. Brodart	Solving a realistic hybrid and flexible flow shop scheduling problem through constraint programming: industrial case in a packaging company	Yes	[332]	2022	CoDIT 2022	6	487	583
PopovicCGNC22 PopovicCGNC22	L. Popovic, A. Côté, M. Gaha, F. Nguewouo, Q. Cappart	Scheduling the Equipment Maintenance of an Electric Power Transmission Network Using Constraint Programming	Yes	[347]	2022	CP 2022	15	493	584
SvancaraB22 SvancaraB22	J. Svancara, R. Barták	Tackling Train Routing via Multi-agent Pathfinding and Constraint-based Scheduling	Yes	[395]	2022	ICAART 2022	8	518	585
Teppan22 Teppan22	Erich Christian Teppan	Types of Flexible Job Shop Scheduling: A Constraint Programming Experiment	Yes	[403]	2022	ICAART 2022	8	523	586
TouatBT22 TouatBT22	M. Touat, B. Benhamou, Fatima Benbouzid-Si Tayeb	A Constraint Programming Model for the Scheduling Problem with Flexible Maintenance under Human Resource Constraints	Yes	[410]	2022	ICAART 2022	8	528	587
WinterMMW22 WinterMMW22	F. Winter, S. Meiswinkel, N. Musliu, D. Walkiewicz	Modeling and Solving Parallel Machine Scheduling with Contamination Constraints in the Agricultural Industry	Yes	[442]	2022	CP 2022	18	546	588
ZhangJZL22 ZhangJZL22	H. Zhang, Y. Ji, Z. Zhao, S. Liu	Constraint Programming for Modeling and Solving a Hybrid Flow Shop Scheduling Problem	Yes	[457]	2022	ICNSC 2022	6	554	589
AntuoriHHEN21 AntuoriHHEN21	V. Antuori, E. Hebrard, M. Huguet, S. Essodaigui, A. Nguyen	Combining Monte Carlo Tree Search and Depth First Search Methods for a Car Manufacturing Workshop Scheduling Problem	Yes	[12]	2021	CP 2021	16	290	590
ArmstrongGOS21 ArmstrongGOS21	E. Armstrong, M. Garraffa, B. O'Sullivan, H. Simonis	The Hybrid Flexible Flowshop with Transportation Times	Yes	[14]	2021	CP 2021	18	292	591
Astrand0F21 Astrand0F21	M. Åstrand, M. Johansson, Hamid Reza Feyzmahdavian	Short-Term Scheduling of Production Fleets in Underground Mines Using CP-Based LNS	Yes	[21]	2021	CPAIOR 2021	18	297	592
BenderWS21 BenderWS21	T. Bender, D. Wittwer, T. Schmidt	Applying Constraint Programming to the Multi-mode Scheduling Problem in Harvest Logistics	Yes	[54]	2021	ICCL 2021	16	314	593
GeibingerKKMMW21 GeibingerKKMMW21	T. Geibinger, L. Kletzander, M. Krainz, F. Mischek, N. Musliu, F. Winter	Physician Scheduling During a Pandemic	Yes	[157]	2021	CPAIOR 2021	10	378	594
GeibingerMM21 GeibingerMM21	T. Geibinger, F. Mischek, N. Musliu	Constraint Logic Programming for Real-World Test Laboratory Scheduling	Yes	[160]	2021	AAAI 2021	9	380	595
HanenKP21 HanenKP21	C. Hanen, Alix Munier Kordon, T. Pedersen	Two Deadline Reduction Algorithms for Scheduling Dependent Tasks on Parallel Processors	Yes	[186]	2021	CPAIOR 2021	17	398	596
HillTV21 HillTV21	A. Hill, J. Ticktin, Thomas W. M. Vossen	A Computational Study of Constraint Programming Approaches for Resource-Constrained Project Scheduling with Autonomous Learning Effects	Yes	[202]	2021	CPAIOR 2021	19	408	597
KlankeBYE21 KlankeBYE21	C. Klanke, Dominik R. Bleidorn, V. Yfantis, S. Engell	Combining Constraint Programming and Temporal Decomposition Approaches - Scheduling of an Industrial Formulation Plant	Yes	[232]	2021	CPAIOR 2021	16	429	598
KovacsTKSG21 KovacsTKSG21	B. Kovács, P. Tassel, W. Kohlenbrein, P. Schrott-Kostwein, M. Gebser	Utilizing Constraint Optimization for Industrial Machine Workload Balancing	Yes	[244]	2021	CP 2021	17	434	599
LacknerMMWW21 LacknerMMWW21	M. Lackner, C. Mrkvicka, N. Musliu, D. Walkiewicz, F. Winter	Minimizing Cumulative Batch Processing Time for an Industrial Oven Scheduling Problem	Yes	[253]	2021	CP 2021	18	443	600
BarzegaranZP20 BarzegaranZP20	M. Barzegaran, B. Zarrin, P. Pop	Quality-Of-Control-Aware Scheduling of Communication in TSN-Based Fog Computing Platforms Using Constraint Programming	Yes	[41]	2020	Fog-IoT 2020	9	308	601
GodetLHS20 GodetLHS20	A. Godet, X. Lorca, E. Hebrard, G. Simonin	Using Approximation within Constraint Programming to Solve the Parallel Machine Scheduling Problem with Additional Unit Resources	Yes	[168]	2020	AAAI 2020	8	387	602
GroleazNS20 GroleazNS20	L. Groleaz, Samba Ndojh Ndiaye, C. Solnon	Solving the Group Cumulative Scheduling Problem with CPO and ACO	Yes	[179]	2020	CP 2020	17	394	603
GroleazNS20a GroleazNS20a	L. Groleaz, Samba Ndojh Ndiaye, C. Solnon	ACO with automatic parameter selection for a scheduling problem with a group cumulative constraint	Yes	[178]	2020	GECCO 2020	9	395	604
Mercier-AubinGQ20 Mercier-AubinGQ20	A. Mercier-Aubin, J. Gaudreault, C. Quimper	Leveraging Constraint Scheduling: A Case Study to the Textile Industry	Yes	[299]	2020	CPAIOR 2020	13	469	605

Table 2: PAPERs from bibtex (Total 283)

Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
NattafM20 NattafM20	M. Nattaf, A. Malapert	Filtering Rules for Flow Time Minimization in a Parallel Machine Scheduling Problem	Yes	[316]	2020	CP 2020	16	479	606
TangB20 TangB20	Tanya Y. Tang, J. Christopher Beck	CP and Hybrid Models for Two-Stage Batching and Scheduling	Yes	[397]	2020	CPAIOR 2020	16	520	607
WangB20 WangB20	R. Wang, N. Barnier	Global Propagation of Transition Cost for Fixed Job Scheduling	Yes	[436]	2020	ECAI 2020	8	542	608
WessenCS20 WessenCS20	J. Wessén, M. Carlsson, C. Schulte	Scheduling of Dual-Arm Multi-tool Assembly Robots and Workspace Layout Optimization	Yes	[440]	2020	CPAIOR 2020	10	545	609
BadicaBIL19 BadicaBIL19	A. Badica, C. Badica, M. Ivanovic, D. Logofatu	Exploring the Space of Block Structured Scheduling Processes Using Constraint Logic Programming	Yes	[25]	2019	IDC 2019	11	299	610
BehrensLM19 BehrensLM19	Jan Kristof Behrens, R. Lange, M. Mansouri	A Constraint Programming Approach to Simultaneous Task Allocation and Motion Scheduling for Industrial Dual-Arm Manipulation Tasks	Yes	[46]	2019	ICRA 2019	7	310	611
BogaerdtW19 BogaerdtW19	Pim van den Bogaerdt, Mathijs de Weerdt	Lower Bounds for Uniform Machine Scheduling Using Decision Diagrams	Yes	[416]	2019	CPAIOR 2019	16	324	612
ColT19 ColT19	Giacomo Da Col, Erich Christian Teppan	Industrial Size Job Shop Scheduling Tackled by Present Day CP Solvers	Yes	[100]	2019	CP 2019	17	346	613
FrimodigS19 FrimodigS19	S. Frimodig, C. Schulte	Models for Radiation Therapy Patient Scheduling	Yes	[145]	2019	CP 2019	17	369	614
FrohnerTR19 FrohnerTR19	N. Frohner, S. Teuschl, Günther R. Raidl	Casual Employee Scheduling with Constraint Programming and Metaheuristics	Yes	[146]	2019	EUROCAST 2019	9	370	615
GalleguillosKSB19 GalleguillosKSB19	C. Galleguillos, Z. Kiziltan, A. Sîrbu, Özalp Babaoglu	Constraint Programming-Based Job Dispatching for Modern HPC Applications	Yes	[148]	2019	CP 2019	18	372	616
GeibingerMM19 GeibingerMM19	T. Geibinger, F. Mischek, N. Musliu	Investigating Constraint Programming for Real World Industrial Test Laboratory Scheduling	Yes	[159]	2019	CPAIOR 2019	16	379	617
KucukY19 KucukY19	M. Küçük, Seyda Topaloglu Yildiz	A Constraint Programming Approach for Agile Earth Observation Satellite Scheduling Problem	Yes	[249]	2019	RAST 2019	5	439	618
LiuLH19 LiuLH19	K. Liu, S. Löffler, P. Hofstedt	Solving the Talent Scheduling Problem by Parallel Constraint Programming	Yes	[269]	2019	AIAI 2019	9	455	619
MalapertN19 MalapertN19	A. Malapert, M. Nattaf	A New CP-Approach for a Parallel Machine Scheduling Problem with Time Constraints on Machine Qualifications	Yes	[289]	2019	CPAIOR 2019	17	465	620
MurinR19 MurinR19	S. Murín, H. Rudová	Scheduling of Mobile Robots Using Constraint Programming	Yes	[310]	2019	CP 2019	16	476	621
ParkUJR19 ParkUJR19	H. Park, J. Um, J. Jung, M. Ruskowski	Developing a Production Scheduling System for Modular Factory Using Constraint Programming	Yes	[337]	2019	RAAD 2019	8	488	622
Tom19 Tom19	M. Tom	Fuzzy Multi-Constraint Programming Model for Weekly Meals Scheduling	Yes	[408]	2019	FUZZ-IEEE 2019	6	527	623
YangSS19 YangSS19	M. Yang, A. Schutt, Peter J. Stuckey	Time Table Edge Finding with Energy Variables	Yes	[447]	2019	CPAIOR 2019	10	551	624
ArbaouiY18 ArbaouiY18	T. Arbaoui, F. Yalaoui	Solving the Unrelated Parallel Machine Scheduling Problem with Additional Resources Using Constraint Programming	Yes	[13]	2018	ACIIDS 2018	10	291	625
AstrandJZ18 AstrandJZ18	M. Åstrand, M. Johansson, A. Zanarini	Fleet Scheduling in Underground Mines Using Constraint Programming	Yes	[22]	2018	CPAIOR 2018	9	298	626
BenediktSMVH18 BenediktSMVH18	O. Benedikt, P. Sucha, I. Módos, M. Vlk, Z. Hanzálek	Energy-Aware Production Scheduling with Power-Saving Modes	Yes	[56]	2018	CPAIOR 2018	10	315	627
DemirovicS18 DemirovicS18	E. Demirovic, Peter J. Stuckey	Constraint Programming for High School Timetabling: A Scheduling-Based Model with Hot Starts	Yes	[115]	2018	CPAIOR 2018	18	353	628
He0GLW18 He0GLW18	S. He, M. Wallace, G. Gange, A. Liebman, C. Wilson	A Fast and Scalable Algorithm for Scheduling Large Numbers of Devices Under Real-Time Pricing	Yes	[188]	2018	CP 2018	18	399	629
HoYCLLCLC18 HoYCLLCLC18	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 Criteria Constraints	Yes	[203]	2018	AICCC 2018	6	409	630
KameugneFGOQ18 KameugneFGOQ18	R. Kameugne, Séverine Betmbe Fetgo, V. Gingras, Y. Ouellet, C. Quimper	Horizontally Elastic Not-First/Not-Last Filtering Algorithm for Cumulative Resource Constraint	Yes	[221]	2018	CPAIOR 2018	17	422	631

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Laborie18a Laborie18a	P. Laborie	An Update on the Comparison of MIP, CP and Hybrid Approaches for Mixed Resource Allocation and Scheduling	Yes	[251]	2018	CPAIOR 2018	9	442	632
NishikawaSTT18 NishikawaSTT18	H. Nishikawa, K. Shimada, I. Taniguchi, H. Tomiyama	Scheduling of Malleable Fork-Join Tasks with Constraint Programming	Yes	[318]	2018	CANDAR 2018	6	480	633
NishikawaSTT18a NishikawaSTT18a	H. Nishikawa, K. Shimada, I. Taniguchi, H. Tomiyama	Scheduling of Malleable Tasks Based on Constraint Programming	Yes	[319]	2018	TENCON 2018	6	481	634
OuelletQ18 OuelletQ18	Y. Ouellet, C. Quimper	A O(n \log ^2 n) Checker and O(n^2 \log n) Filtering Algorithm for the Energetic Reasoning	Yes	[330]	2018	CPAIOR 2018	18	485	635
RiahiNS018 RiahiNS018	V. Riahi, M. A. Hakim Newton, K. Su, A. Sattar	Local Search for Flowshops with Setup Times and Blocking Constraints	Yes	[359]	2018	ICAPS 2018	9	501	636
Tesch18 Tesch18	A. Tesch	Improving Energetic Propagations for Cumulative Scheduling	Yes	[405]	2018	CP 2018	17	525	637
BofillCSV17 BofillCSV17	M. Bofill, J. Coll, J. Suy, M. Villaret	An Efficient SMT Approach to Solve MRCPSP/max Instances with Tight Constraints on Resources	Yes	[66]	2017	CP 2017	9	321	638
CappartS17 CappartS17	Q. Cappart, P. Schaus	Rescheduling Railway Traffic on Real Time Situations Using Time-Interval Variables	Yes	[89]	2017	CPAIOR 2017	16	336	639
GelainPRVW17 GelainPRVW17	M. Gelain, Maria Silvia Pini, F. Rossi, Kristen Brent Venable, T. Walsh	A Local Search Approach for Incomplete Soft Constraint Problems: Experimental Results on Meeting Scheduling Problems	Yes	[162]	2017	CPAIOR 2017	16	382	640
GoldwaserS17 GoldwaserS17	A. Goldwaser, A. Schutt	Optimal Torpedo Scheduling	Yes	[171]	2017	CP 2017	16	388	641
Hooker17 Hooker17	John N. Hooker	Job Sequencing Bounds from Decision Diagrams	Yes	[208]	2017	CP 2017	14	413	642
KletzanderM17 KletzanderM17	L. Kletzander, N. Musliu	A Multi-stage Simulated Annealing Algorithm for the Torpedo Scheduling Problem	Yes	[233]	2017	CPAIOR 2017	15	430	643
LiuCGM17 LiuCGM17	T. Liu, Roberto Di Cosmo, M. Gabbrielli, J. Mauro	NightSplitter: A Scheduling Tool to Optimize (Sub)group Activities	Yes	[270]	2017	CP 2017	17	453	644
Madi-WambaLOBM17 Madi-WambaLOBM17	G. Madi-Wamba, Y. Li, A. Orgerie, N. Beldiceanu, J. Menaud	Green Energy Aware Scheduling Problem in Virtualized Datacenters	Yes	[287]	2017	ICPADS 2017	8	463	645
MossigeGSMC17 MossigeGSMC17	M. Mossige, A. Gotlieb, H. Spieker, H. Meling, M. Carlsson	Time-Aware Test Case Execution Scheduling for Cyber-Physical Systems	Yes	[306]	2017	CP 2017	18	473	646
Pralet17 Pralet17	C. Pralet	An Incomplete Constraint-Based System for Scheduling with Renewable Resources	Yes	[350]	2017	CP 2017	19	495	647
YoungFS17 YoungFS17	Kenneth D. Young, T. Feydy, A. Schutt	Constraint Programming Applied to the Multi-Skill Project Scheduling Problem	Yes	[449]	2017	CP 2017	10	552	648
BonfiettiZLM16 BonfiettiZLM16	A. Bonfietti, A. Zanarini, M. Lombardi, M. Milano	The Multirate Resource Constraint	Yes	[76]	2016	CP 2016	17	330	649
BoothNB16 BoothNB16	Kyle E. C. Booth, G. Nejat, J. Christopher Beck	A Constraint Programming Approach to Multi-Robot Task Allocation and Scheduling in Retirement Homes	Yes	[77]	2016	CP 2016	17	331	650
BridiLBBM16 BridiLBBM16	T. Bridi, M. Lombardi, A. Bartolini, L. Benini, M. Milano	DARDIS: Distributed And Randomized DIspatching and Scheduling	Yes	[84]	2016	ECAI 2016	2	333	651
CauwelaertDMS16 CauwelaertDMS16	Sascha Van Cauwelaert, C. Dejemeppe, J. Monette, P. Schaus	Efficient Filtering for the Unary Resource with Family-Based Transition Times	Yes	[92]	2016	CP 2016	16	339	652
FontaineMH16 FontaineMH16	D. Fontaine, Laurent D. Michel, Pascal Van Hentenryck	Parallel Composition of Scheduling Solvers	Yes	[141]	2016	CPAIOR 2016	11	366	653
GilesH16 GilesH16	K. Giles, Willem-Jan van Hoeve	Solving a Supply-Delivery Scheduling Problem with Constraint Programming	Yes	[164]	2016	CP 2016	16	384	654
GingrasQ16 GingrasQ16	V. Gingras, C. Quimper	Generalizing the Edge-Finder Rule for the Cumulative Constraint	Yes	[165]	2016	IJCAI 2016	7	385	655
HechingH16 HechingH16	Aliza R. Heching, John N. Hooker	Scheduling Home Hospice Care with Logic-Based Benders Decomposition	Yes	[190]	2016	CPAIOR 2016	11	401	656
JelinekB16 JelinekB16	J. Jelínek, R. Barták	Using Constraint Logic Programming to Schedule Solar Array Operations on the International Space Station	Yes	[214]	2016	PADL 2016	10	417	657
LimHTB16 LimHTB16	B. Lim, Hassan L. Hijazi, S. Thiébaux, Menkes van den Briel	Online HVAC-Aware Occupancy Scheduling with Adaptive Temperature Control	Yes	[265]	2016	CP 2016	18	450	658

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Madi-WambaB16 Madi-WambaB16	G. Madi-Wamba, N. Beldiceanu	The TaskIntersection Constraint	Yes	[286]	2016	CPAIOR 2016	16	462	659
SchuttS16 SchuttS16	A. Schutt, Peter J. Stuckey	Explaining Producer/Consumer Constraints	Yes	[376]	2016	CP 2016	17	509	660
SzerediS16 SzerediS16	R. Szeredi, A. Schutt	Modelling and Solving Multi-mode Resource-Constrained Project Scheduling	Yes	[396]	2016	CP 2016	10	519	661
Tesch16 Tesch16	A. Tesch	A Nearly Exact Propagation Algorithm for Energetic Reasoning in $\mathcal{O}(n^2 \log n)$	Yes	[404]	2016	CP 2016	27	524	662
BartakV15 BartakV15	R. Barták, M. Vlk	Reactive Recovery from Machine Breakdown in Production Scheduling with Temporal Distance and Resource Constraints	Yes	[39]	2015	ICAART 2015	12	306	663
BofillGSV15 BofillGSV15	M. Bofill, M. Garcia, J. Suy, M. Villaret	MaxSAT-Based Scheduling of B2B Meetings	Yes	[68]	2015	CPAIOR 2015	9	323	664
BurtLPS15 BurtLPS15	Christina N. Burt, N. Lipovetzky, Adrian R. Pearce, Peter J. Stuckey	Scheduling with Fixed Maintenance, Shared Resources and Nonlinear Feedrate Constraints: A Mine Planning Case Study	Yes	[86]	2015	CPAIOR 2015	17	335	665
DejemeppeCS15 DejemeppeCS15	C. Dejemeppe, Sascha Van Cauwelaert, P. Schaus	The Unary Resource with Transition Times	Yes	[112]	2015	CP 2015	16	351	666
EvenSH15 EvenSH15	C. Even, A. Schutt, Pascal Van Hentenryck	A Constraint Programming Approach for Non-preemptive Evacuation Scheduling	Yes	[131]	2015	CP 2015	18	364	667
GayHLS15 GayHLS15	S. Gay, R. Hartert, C. Lecoutre, P. Schaus	Conflict Ordering Search for Scheduling Problems	Yes	[152]	2015	CP 2015	9	374	668
GayHS15 GayHS15	S. Gay, R. Hartert, P. Schaus	Simple and Scalable Time-Table Filtering for the Cumulative Constraint	Yes	[153]	2015	CP 2015	9	375	669
GayHS15a GayHS15a	S. Gay, R. Hartert, P. Schaus	Time-Table Disjunctive Reasoning for the Cumulative Constraint	Yes	[154]	2015	CPAIOR 2015	16	376	670
KreterSS15 KreterSS15	S. Kreter, A. Schutt, Peter J. Stuckey	Modeling and Solving Project Scheduling with Calendars	Yes	[245]	2015	CP 2015	17	437	671
LimBTBB15 LimBTBB15	B. Lim, Menkes van den Briel, S. Thiébaux, R. Bent, S. Backhaus	Large Neighborhood Search for Energy Aware Meeting Scheduling in Smart Buildings	Yes	[266]	2015	CPAIOR 2015	15	449	672
LombardiBM15 LombardiBM15	M. Lombardi, A. Bonfietti, M. Milano	Deterministic Estimation of the Expected Makespan of a POS Under Duration Uncertainty	Yes	[272]	2015	CP 2015	16	456	673
MelgarejoLS15 MelgarejoLS15	P. Aguiar-Melgarejo, P. Laborie, C. Solnon	A Time-Dependent No-Overlap Constraint: Application to Urban Delivery Problems	Yes	[6]	2015	CPAIOR 2015	17	468	674
MurphyMB15 MurphyMB15	Seán Óg Murphy, O. Manzano, Kenneth N. Brown	Design and Evaluation of a Constraint-Based Energy Saving and Scheduling Recommender System	Yes	[311]	2015	CP 2015	17	477	675
PesantRR15 PesantRR15	G. Pesant, G. Rix, L. Rousseau	A Comparative Study of MIP and CP Formulations for the B2B Scheduling Optimization Problem	Yes	[341]	2015	CPAIOR 2015	16	491	676
PraletLJ15 PraletLJ15	C. Pralet, S. Lemai-Chenevier, J. Jaubert	Scheduling Running Modes of Satellite Instruments Using Constraint-Based Local Search	Yes	[351]	2015	CP 2015	16	496	677
SialaAH15 SialaAH15	M. Siala, C. Artigues, E. Hebrard	Two Clause Learning Approaches for Disjunctive Scheduling	Yes	[383]	2015	CP 2015	10	512	678
VilimLS15 VilimLS15	P. Vilím, P. Laborie, P. Shaw	Failure-Directed Search for Constraint-Based Scheduling	Yes	[430]	2015	CPAIOR 2015	17	541	679
ZhouGL15 ZhouGL15	J. Zhou, Y. Guo, G. Li	On complex hybrid flexible flowshop scheduling problems based on constraint programming	Yes	[463]	2015	FSKD 2015	5	557	680
AlesioNBG14 AlesioNBG14	Stefano Di Alesio, S. Nejati, Lionel C. Briand, A. Gotlieb	Worst-Case Scheduling of Software Tasks - A Constraint Optimization Model to Support Performance Testing	Yes	[119]	2014	CP 2014	18	288	681
BartoliniBBLM14 BartoliniBBLM14	A. Bartolini, A. Borghesi, T. Bridi, M. Lombardi, M. Milano	Proactive Workload Dispatching on the EURORA Supercomputer	Yes	[40]	2014	CP 2014	16	307	682
BessiereHMQW14 BessiereHMQW14	C. Bessiere, E. Hebrard, M. Ménard, C. Quimper, T. Walsh	Buffered Resource Constraint: Algorithms and Complexity	Yes	[61]	2014	CPAIOR 2014	16	318	683
BofillEGPSV14 BofillEGPSV14	M. Bofill, J. Espasa, M. Garcia, M. Palahí, J. Suy, M. Villaret	Scheduling B2B Meetings	Yes	[67]	2014	CP 2014	16	322	684
BonfiettiLM14 BonfiettiLM14	A. Bonfietti, M. Lombardi, M. Milano	Disregarding Duration Uncertainty in Partial Order Schedules? Yes, We Can!	Yes	[74]	2014	CPAIOR 2014	16	328	685
DejemeppeD14 DejemeppeD14	C. Dejemeppe, Y. Deville	Continuously Degrading Resource and Interval Dependent Activity Durations in Nuclear Medicine Patient Scheduling	Yes	[113]	2014	CPAIOR 2014	9	352	686

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DerrienP14 DerrienP14	A. Derrien, T. Petit	A New Characterization of Relevant Intervals for Energetic Reasoning	Yes	[117]	2014	CP 2014	9	354	687
DerrienPZ14 DerrienPZ14	A. Derrien, T. Petit, S. Zampelli	A Declarative Paradigm for Robust Cumulative Scheduling	Yes	[118]	2014	CP 2014	9	355	688
DoulabiRP14 DoulabiRP14	Seyed Hossein Hashemi Doulabi, L. Rousseau, G. Pesant	A Constraint Programming-Based Column Generation Approach for Operating Room Planning and Scheduling	Yes	[123]	2014	CPAIOR 2014	9	358	689
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	[144]	2014	GOR 2014	7	No	690
GaySS14 GaySS14	S. Gay, P. Schaus, Vivian De Smedt	Continuous Casting Scheduling with Constraint Programming	Yes	[155]	2014	CP 2014	15	377	691
HoundjiSWD14 HoundjiSWD14	Vinasétan Ratheil Houndji, P. Schaus, Laurence A. Wolsey, Y. Deville	The StockingCost Constraint	Yes	[210]	2014	CP 2014	16	415	692
KoschB14 KoschB14	S. Kosch, J. Christopher Beck	A New MIP Model for Parallel-Batch Scheduling with Non-identical Job Sizes	Yes	[237]	2014	CPAIOR 2014	16	432	693
BonfiettiLM13 BonfiettiLM13	A. Bonfietti, M. Lombardi, M. Milano	De-Cycling Cyclic Scheduling Problems	Yes	[73]	2013	ICAPS 2013	5	327	694
CireCH13 CireCH13	André A. Ciré, E. Coban, John N. Hooker	Mixed Integer Programming vs. Logic-Based Benders Decomposition for Planning and Scheduling	Yes	[96]	2013	CPAIOR 2013	7	343	695
GuSS13 GuSS13	H. Gu, A. Schutt, Peter J. Stuckey	A Lagrangian Relaxation Based Forward-Backward Improvement Heuristic for Maximising the Net Present Value of Resource-Constrained Projects	Yes	[181]	2013	CPAIOR 2013	7	397	696
HeinzKB13 HeinzKB13	S. Heinz, W. Ku, J. Christopher Beck	Recent Improvements Using Constraint Integer Programming for Resource Allocation and Scheduling	Yes	[192]	2013	CPAIOR 2013	16	403	697
KelarevaTK13 KelarevaTK13	E. Kelareva, K. Tierney, P. Kilby	CP Methods for Scheduling and Routing with Time-Dependent Task Costs	Yes	[226]	2013	CPAIOR 2013	17	425	698
LetortCB13 LetortCB13	A. Letort, M. Carlsson, N. Beldiceanu	A Synchronized Sweep Algorithm for the $k\text{-}dimensional$ $cumulative$ Constraint	Yes	[260]	2013	CPAIOR 2013	16	447	699
LombardiM13 LombardiM13	M. Lombardi, M. Milano	A Min-Flow Algorithm for Minimal Critical Set Detection in Resource Constrained Project Scheduling	Yes	[279]	2013	ICAPS 2013	2	460	700
OuelletQ13 OuelletQ13	P. Ouellet, C. Quimper	Time-Table Extended-Edge-Finding for the Cumulative Constraint	Yes	[329]	2013	CP 2013	16	484	701
SchuttFS13 SchuttFS13	A. Schutt, T. Feydy, Peter J. Stuckey	Scheduling Optional Tasks with Explanation	Yes	[373]	2013	CP 2013	17	506	702
SchuttFS13a SchuttFS13a	A. Schutt, T. Feydy, Peter J. Stuckey	Explaining Time-Table-Edge-Finding Propagation for the Cumulative Resource Constraint	Yes	[372]	2013	CPAIOR 2013	17	507	703
BillautHL12 BillautHL12	J. Billaut, E. Hebrard, P. Lopez	Complete Characterization of Near-Optimal Sequences for the Two-Machine Flow Shop Scheduling Problem	Yes	[62]	2012	CPAIOR 2012	15	319	704
BonfiettiLBM12 BonfiettiLBM12	A. Bonfietti, M. Lombardi, L. Benini, M. Milano	Global Cyclic Cumulative Constraint	Yes	[71]	2012	CPAIOR 2012	16	326	705
BonfiettiM12 BonfiettiM12	A. Bonfietti, M. Milano	A Constraint-based Approach to Cyclic Resource-Constrained Scheduling Problem	Yes	[75]	2012	DC SIAAI 2012	3	329	706
HeinzB12 HeinzB12	S. Heinz, J. Christopher Beck	Reconsidering Mixed Integer Programming and MIP-Based Hybrids for Scheduling	Yes	[191]	2012	CPAIOR 2012	17	402	707
IfrimOS12 IfrimOS12	G. Ifrim, B. O'Sullivan, H. Simonis	Properties of Energy-Price Forecasts for Scheduling	Yes	[212]	2012	CP 2012	16	416	708
LetortBC12 LetortBC12	A. Letort, N. Beldiceanu, M. Carlsson	A Scalable Sweep Algorithm for the cumulative Constraint	Yes	[259]	2012	CP 2012	16	446	709
RendlPHPR12 RendlPHPR12	A. Rendl, M. Prandtstetter, G. Hiermann, J. Puchinger, Günther R. Raidl	Hybrid Heuristics for Multimodal Homecare Scheduling	Yes	[358]	2012	CPAIOR 2012	17	500	710
SchuttCSW12 SchuttCSW12	A. Schutt, G. Chu, Peter J. Stuckey, Mark G. Wallace	Maximising the Net Present Value for Resource-Constrained Project Scheduling	Yes	[371]	2012	CPAIOR 2012	17	505	711
SerraNM12 SerraNM12	T. Serra, G. Nishioka, Fernando J. M. Marcellino	The Offshore Resources Scheduling Problem: Detailing a Constraint Programming Approach	Yes	[378]	2012	CP 2012	17	511	712
SimoninAHL12 SimoninAHL12	G. Simonin, C. Artigues, E. Hebrard, P. Lopez	Scheduling Scientific Experiments on the Rosetta/Philae Mission	Yes	[384]	2012	CP 2012	15	513	713
ZhangLS12 ZhangLS12	X. Zhang, Z. Lv, X. Song	Model and Solution for Hot Strip Rolling Scheduling Problem Based on Constraint Programming Method	Yes	[460]	2012	CIT 2012	4	555	714

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BonfiettiLBM11 BonfiettiLBM11	A. Bonfietti, M. Lombardi, L. Benini, M. Milano	A Constraint Based Approach to Cyclic RCPSP	Yes	[70]	2011	CP 2011	15	325	715
ChapadosJR11 ChapadosJR11	N. Chapados, M. Joliveau, L. Rousseau	Retail Store Workforce Scheduling by Expected Operating Income Maximization	Yes	[94]	2011	CPAIOR 2011	6	341	716
ClercqPBJ11 ClercqPBJ11	Alexis De Clercq, T. Petit, N. Beldiceanu, N. Jussien	Filtering Algorithms for Discrete Cumulative Problems with Overloads of Resource	Yes	[97]	2011	CP 2011	16	344	717
EdisO11 EdisO11	Emrah B. Edis, C. Oguz	Parallel Machine Scheduling with Additional Resources: A Lagrangian-Based Constraint Programming Approach	Yes	[125]	2011	CPAIOR 2011	7	359	718
GrimesH11 GrimesH11	D. Grimes, E. Hebrard	Models and Strategies for Variants of the Job Shop Scheduling Problem	Yes	[175]	2011	CP 2011	17	392	719
HeinzS11 HeinzS11	S. Heinz, J. Schulz	Explanations for the Cumulative Constraint: An Experimental Study	Yes	[194]	2011	SEA 2011	10	404	720
HermenierDL11 HermenierDL11	F. Hermenier, S. Demassey, X. Lorca	Bin Repacking Scheduling in Virtualized Datacenters	Yes	[201]	2011	CP 2011	15	407	721
KameugneFSN11 KameugneFSN11	R. Kameugne, Laure Pauline Fotso, Joseph D. Scott, Y. Ngo-Kateu	A Quadratic Edge-Finding Filtering Algorithm for Cumulative Resource Constraints	Yes	[223]	2011	CP 2011	15	424	722
LahimerLH11 LahimerLH11	A. Lahimer, P. Lopez, M. Haouari	Climbing Depth-Bounded Adjacent Discrepancy Search for Solving Hybrid Flow Shop Scheduling Problems with Multiprocessor Tasks	Yes	[255]	2011	CPAIOR 2011	14	444	723
LombardiBMB11 LombardiBMB11	M. Lombardi, A. Bonfietti, M. Milano, L. Benini	Precedence Constraint Posting for Cyclic Scheduling Problems	Yes	[273]	2011	CPAIOR 2011	17	457	724
Vilim11 Vilim11	P. Vilím	Timetable Edge Finding Filtering Algorithm for Discrete Cumulative Resources	Yes	[427]	2011	CPAIOR 2011	16	539	725
ZibranR11 ZibranR11	Minhaz F. Zibran, Chanchal K. Roy	Conflict-Aware Optimal Scheduling of Code Clone Refactoring: A Constraint Programming Approach	Yes	[465]	2011	ICPC 2011	4	559	726
ZibranR11a ZibranR11a	Minhaz F. Zibran, Chanchal K. Roy	A Constraint Programming Approach to Conflict-Aware Optimal Scheduling of Prioritized Code Clone Refactoring	Yes	[466]	2011	SCAM 2011	10	560	727
BertholdHLMS10 BertholdHLMS10	T. Berthold, S. Heinz, Marco E. Lübbecke, Rolf H. Möhring, J. Schulz	A Constraint Integer Programming Approach for Resource-Constrained Project Scheduling	Yes	[60]	2010	CPAIOR 2010	5	317	728
CobanH10 CobanH10	E. Coban, John N. Hooker	Single-Facility Scheduling over Long Time Horizons by Logic-Based Benders Decomposition	Yes	[98]	2010	CPAIOR 2010	5	345	729
Davenport10 Davenport10	Andrew J. Davenport	Integrated Maintenance Scheduling for Semiconductor Manufacturing	Yes	[106]	2010	CPAIOR 2010	5	349	730
GrimesH10 GrimesH10	D. Grimes, E. Hebrard	Job Shop Scheduling with Setup Times and Maximal Time-Lags: A Simple Constraint Programming Approach	Yes	[174]	2010	CPAIOR 2010	15	391	731
LombardiM10 LombardiM10	M. Lombardi, M. Milano	Constraint Based Scheduling to Deal with Uncertain Durations and Self-Timed Execution	Yes	[276]	2010	CP 2010	15	459	732
MakMS10 MakMS10	K. Mak, J. Ma, W. Su	A constraint programming approach for production scheduling of multi-period virtual cellular manufacturing systems	Yes	[288]	2010	ICNC 2010	5	464	733
SchuttW10 SchuttW10	A. Schutt, A. Wolf	A New $O(n^2 \log n)$ Not-First/Not-Last Pruning Algorithm for Cumulative Resource Constraints	Yes	[377]	2010	CP 2010	15	510	734
SunLYL10 SunLYL10	Z. Sun, H. Li, M. Yao, N. Li	Scheduling Optimization Techniques for FlexRay Using Constraint-Programming	Yes	[393]	2010	GreenCom 2010	6	517	735
Acuna-AgostMFG09 Acuna-AgostMFG09	R. Acuna-Agost, P. Michelon, D. Feillet, S. Gueye	Constraint Programming and Mixed Integer Linear Programming for Rescheduling Trains under Disrupted Operations	Yes	[4]	2009	CPAIOR 2009	2	286	736
AronssonBK09 AronssonBK09	M. Aronsson, M. Bohlin, P. Kreuger	MILP formulations of cumulative constraints for railway scheduling - A comparative study	Yes	[16]	2009	ATMOS 2009	13	294	737
Baptiste09 Baptiste09	P. Baptiste	Constraint-Based Schedulers, Do They Really Work?	Yes	[26]	2009	CP 2009	1	300	738
GrimesHM09 GrimesHM09	D. Grimes, E. Hebrard, A. Malapert	Closing the Open Shop: Contradicting Conventional Wisdom	Yes	[176]	2009	CP 2009	9	393	739

Table 2: PAPERs from bibtex (Total 283)

Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
Laborie09 Laborie09	P. Laborie	IBM ILOG CP Optimizer for Detailed Scheduling Illustrated on Three Problems	Yes	[250]	2009	CPAIOR 2009	15	441	740
LombardiM09 LombardiM09	M. Lombardi, M. Milano	A Precedence Constraint Posting Approach for the RCPSP with Time Lags and Variable Durations	Yes	[274]	2009	CP 2009	15	458	741
MonetteDH09 MonetteDH09	J. Monette, Y. Deville, Pascal Van Hentenryck	Just-In-Time Scheduling with Constraint Programming	Yes	[303]	2009	ICAPS 2009	8	472	742
SchuttFSW09 SchuttFSW09	A. Schutt, T. Feydy, Peter J. Stuckey, M. Wallace	Why Cumulative Decomposition Is Not as Bad as It Sounds	Yes	[374]	2009	CP 2009	16	508	743
ThiruvadyBME09 ThiruvadyBME09	Dhananjay R. Thiruvady, C. Blum, B. Meyer, Andreas T. Ernst	Hybridizing Beam-ACO with Constraint Programming for Single Machine Job Scheduling	Yes	[406]	2009	HM 2009	15	526	744
Vilim09 Vilim09	P. Vilím	Edge Finding Filtering Algorithm for Discrete Cumulative Resources in $O(kn \log n)${\mathcal O}(kn {\rm log} n)	Yes	[425]	2009	CP 2009	15	537	745
Vilim09a Vilim09a	P. Vilím	Max Energy Filtering Algorithm for Discrete Cumulative Resources	Yes	[426]	2009	CPAIOR 2009	15	538	746
BarlattCG08 BarlattCG08	A. Barlatt, Amy Mainville Cohn, Oleg Yu. Gusikhin	A Hybrid Approach for Solving Shift-Selection and Task-Sequencing Problems	Yes	[32]	2008	CPAIOR 2008	5	303	747
BeldiceanuCP08 BeldiceanuCP08	N. Beldiceanu, M. Carlsson, E. Poder	New Filtering for the cumulative Constraint in the Context of Non-Overlapping Rectangles	Yes	[51]	2008	CPAIOR 2008	15	312	748
DoomsH08 DoomsH08	G. Dooms, Pascal Van Hentenryck	Gap Reduction Techniques for Online Stochastic Project Scheduling	Yes	[122]	2008	CPAIOR 2008	16	357	749
HentenryckM08 HentenryckM08	Pascal Van Hentenryck, L. Michel	The Steel Mill Slab Design Problem Revisited	Yes	[200]	2008	CPAIOR 2008	5	406	750
LauLN08 LauLN08	Hoong Chuin Lau, Kong Wei Lye, Viet Bang Nguyen	A Combinatorial Auction Framework for Solving Decentralized Scheduling Problems (Extended Abstract)	Yes	[257]	2008	CPAIOR 2008	5	445	751
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	Yes	[308]	2008	CP 2008	16	474	752
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	Yes	[307]	2008	CSE 2008	8	475	753
PoderB08 PoderB08	E. Poder, N. Beldiceanu	Filtering for a Continuous Multi-Resources cumulative Constraint with Resource Consumption and Production	Yes	[343]	2008	ICAPS 2008	8	492	754
WatsonB08 WatsonB08	J. Watson, J. Christopher Beck	A Hybrid Constraint Programming / Local Search Approach to the Job-Shop Scheduling Problem	Yes	[439]	2008	CPAIOR 2008	15	544	755
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	Yes	[415]	2007	CPAIOR 2007	15	287	756
BeldiceanuP07 BeldiceanuP07	N. Beldiceanu, E. Poder	A Continuous Multi-resources cumulative Constraint with Positive-Negative Resource Consumption-Production	Yes	[52]	2007	CPAIOR 2007	15	313	757
DavenportKRSH07 DavenportKRSH07	Andrew J. Davenport, J. Kalagnanam, C. Reddy, S. Siegel, J. Hou	An Application of Constraint Programming to Generating Detailed Operations Schedules for Steel Manufacturing	Yes	[107]	2007	CP 2007	13	350	758
GarganiR07 GarganiR07	A. Gargani, P. Refalo	An Efficient Model and Strategy for the Steel Mill Slab Design Problem	Yes	[149]	2007	CP 2007	13	373	759
HoeveGSL07 HoeveGSL07	Willem Jan van Hoeve, Carla P. Gomes, B. Selman, M. Lombardi	Optimal Multi-Agent Scheduling with Constraint Programming	Yes	[418]	2007	AAAI 2007	6	410	760
KeriK07 KeriK07	A. Kéri, T. Kis	Computing Tight Time Windows for RCPSPWET with the Primal-Dual Method	Yes	[228]	2007	CPAIOR 2007	14	426	761
KrogtLPHJ07 KrogtLPHJ07	Roman van der Krogt, J. Little, K. Pulliam, S. Hanhilammi, Y. Jin	Scheduling for Cellular Manufacturing	Yes	[417]	2007	CP 2007	13	438	762
Limtanyakul07 Limtanyakul07	K. Limtanyakul	Scheduling of Tests on Vehicle Prototypes Using Constraint and Integer Programming	Yes	[267]	2007	GOR 2007	6	452	763
MonetteDD07 MonetteDD07	J. Monette, Y. Deville, P. Dupont	A Position-Based Propagator for the Open-Shop Problem	Yes	[302]	2007	CPAIOR 2007	14	471	764
RossiTHP07 RossiTHP07	R. Rossi, A. Tarim, B. Hnich, Steven D. Prestwich	Replenishment Planning for Stochastic Inventory Systems with Shortage Cost	Yes	[363]	2007	CPAIOR 2007	15	503	765

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Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
BeniniBGM06 BeniniBGM06	L. Benini, D. Bertozzi, A. Guerri, M. Milano	Allocation, Scheduling and Voltage Scaling on Energy Aware MPSoCs	Yes	[57]	2006	CPAIOR 2006	15	316	766
GomesHS06 GomesHS06	Carla P. Gomes, Willem Jan van Hoeve, B. Selman	Constraint Programming for Distributed Planning and Scheduling	Yes	[173]	2006	AAAI 2006	2	390	767
KhemmoudjPB06 KhemmoudjPB06	Mohand Ou Idir Khemmoudj, M. Porcheron, H. Bennaceur	When Constraint Programming and Local Search Solve the Scheduling Problem of Electricité de France Nuclear Power Plant Outages	Yes	[230]	2006	CP 2006	13	427	768
KovacsV06 KovacsV06	A. Kovács, J. Váncza	Progressive Solutions: A Simple but Efficient Dominance Rule for Practical RCPSP	Yes	[243]	2006	CPAIOR 2006	13	436	769
LiuJ06 LiuJ06	Y. Liu, Y. Jiang	LP-TPOP: Integrating Planning and Scheduling Through Constraint Programming	Yes	[271]	2006	PRICAI 2006	5	454	770
QuSN06 QuSN06	Y. Qu, J. Soininen, J. Nurmi	Using Constraint Programming to Achieve Optimal Prefetch Scheduling for Dependent Tasks on Run-Time Reconfigurable Devices	Yes	[356]	2006	SoC 2006	4	498	771
AbrilSB05 AbrilSB05	M. Abril, Miguel A. Salido, F. Barber	Distributed Constraints for Large-Scale Scheduling Problems	Yes	[3]	2005	CP 2005	1	285	772
ArtiouchineB05 ArtiouchineB05	K. Artiouchine, P. Baptiste	Inter-distance Constraint: An Extension of the All-Different Constraint for Scheduling Equal Length Jobs	Yes	[19]	2005	CP 2005	15	296	773
CarchraeBF05 CarchraeBF05	T. Carchrae, J. Christopher Beck, Eugene C. Freuder	Methods to Learn Abstract Scheduling Models	Yes	[90]	2005	CP 2005	1	337	774
ChuX05 ChuX05	Y. Chu, Q. Xia	A Hybrid Algorithm for a Class of Resource Constrained Scheduling Problems	Yes	[95]	2005	CPAIOR 2005	15	342	775
DilkinaDH05 DilkinaDH05	B. Dilkina, L. Duan, William S. Havens	Extending Systematic Local Search for Job Shop Scheduling Problems	Yes	[120]	2005	CP 2005	5	356	776
FortinZDF05 FortinZDF05	J. Fortin, P. Zielinski, D. Dubois, H. Fargier	Interval Analysis in Scheduling	Yes	[142]	2005	CP 2005	15	367	777
FrankK05 FrankK05	J. Frank, E. Kürklü	Mixed Discrete and Continuous Algorithms for Scheduling Airborne Astronomy Observations	Yes	[143]	2005	CPAIOR 2005	18	368	778
Geske05 Geske05	U. Geske	Railway Scheduling with Declarative Constraint Programming	Yes	[163]	2005	INAP 2005	18	383	779
GodardLN05 GodardLN05	D. Godard, P. Laborie, W. Nuijten	Randomized Large Neighborhood Search for Cumulative Scheduling	Yes	[166]	2005	ICAPS 2005	9	386	780
HebrardTW05 HebrardTW05	E. Hebrard, P. Tyler, T. Walsh	Computing Super-Schedules	Yes	[189]	2005	CP 2005	1	400	781
Hooker05a Hooker05a	John N. Hooker	Planning and Scheduling to Minimize Tardiness	Yes	[206]	2005	CP 2005	14	412	782
KovacsEKV05 KovacsEKV05	A. Kovács, P. Egri, T. Kis, J. Váncza	Proterv-II: An Integrated Production Planning and Scheduling System	Yes	[240]	2005	CP 2005	1	433	783
MoffittPP05 MoffittPP05	Michael D. Moffitt, B. Peintner, Martha E. Pollack	Augmenting Disjunctive Temporal Problems with Finite-Domain Constraints	Yes	[300]	2005	AAAI 2005	6	470	784
QuirogaZH05 QuirogaZH05	O. Quiroga, L. Zeballos, Gabriela P. Henning	A Constraint Programming Approach to Tool Allocation and Resource Scheduling in FMS	Yes	[357]	2005	ICRA 2005	6	499	785
Vilim05 Vilim05	P. Vilím	Computing Explanations for the Unary Resource Constraint	Yes	[424]	2005	CPAIOR 2005	14	536	786
WolfS05 WolfS05	A. Wolf, G. Schrader	$O(n \log n)$ Overload Checking for the Cumulative Constraint and Its Application	Yes	[444]	2005	INAP 2005	14	548	787
WuBB05 WuBB05	Christine Wei Wu, Kenneth N. Brown, J. Christopher Beck	Scheduling with Uncertain Start Dates	Yes	[446]	2005	CP 2005	1	550	788
ArtiguesBF04 ArtiguesBF04	C. Artigues, S. Belmokhtar, D. Feillet	A New Exact Solution Algorithm for the Job Shop Problem with Sequence-Dependent Setup Times	Yes	[17]	2004	CPAIOR 2004	13	295	789
HentenryckM04 HentenryckM04	Pascal Van Hentenryck, L. Michel	Scheduling Abstractions for Local Search	Yes	[199]	2004	CPAIOR 2004	16	405	790
Hooker04 Hooker04	John N. Hooker	A Hybrid Method for Planning and Scheduling	Yes	[204]	2004	CP 2004	12	411	791
KovacsV04 KovacsV04	A. Kovács, J. Váncza	Completable Partial Solutions in Constraint Programming and Constraint-Based Scheduling	Yes	[242]	2004	CP 2004	15	435	792

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LimRX04 LimRX04	A. Lim, B. Rodrigues, Z. Xu	Solving the Crane Scheduling Problem Using Intelligent Search Schemes	Yes	[264]	2004	CP 2004	5	451	793
MaraveliasG04 MaraveliasG04	Christos T. Maravelias, Ignacio E. Grossmann	Using MILP and CP for the Scheduling of Batch Chemical Processes	Yes	[292]	2004	CPAIOR 2004	20	466	794
Sadykov04 Sadykov04	R. Sadykov	A Hybrid Branch-And-Cut Algorithm for the One-Machine Scheduling Problem	Yes	[366]	2004	CPAIOR 2004	7	504	795
Vilim04 Vilim04	P. Vilím	O(n log n) Filtering Algorithms for Unary Resource Constraint	Yes	[423]	2004	CPAIOR 2004	13	535	796
VilimBC04 VilimBC04	P. Vilím, R. Barták, O. Cepek	Unary Resource Constraint with Optional Activities	Yes	[428]	2004	CP 2004	15	540	797
VillaverdeP04 VillaverdeP04	K. Villaverde, E. Pontelli	An Investigation of Scheduling in Distributed Constraint Logic Programming	No	[431]	2004	ISCA 2004	6	No	798
WolinskiKG04 WolinskiKG04	C. Wolinski, K. Kuchcinski, Maya B. Gokhale	A Constraints Programming Approach to Communication Scheduling on SoPC Architectures	Yes	[445]	2004	DSD 2004	8	549	799
DannaP03 DannaP03	E. Danna, L. Perron	Structured vs. Unstructured Large Neighborhood Search: A Case Study on Job-Shop Scheduling Problems with Earliness and Tardiness Costs	Yes	[104]	2003	CP 2003	5	348	800
Kumar03 Kumar03	T. K. Satish Kumar	Incremental Computation of Resource-Envelopes in Producer-Consumer Models	Yes	[248]	2003	CP 2003	15	440	801
OddiPCC03 OddiPCC03	A. Oddi, N. Policella, A. Cesta, G. Cortellessa	Generating High Quality Schedules for a Spacecraft Memory Downlink Problem	Yes	[328]	2003	CP 2003	15	483	802
ValleMGT03 ValleMGT03	Carmelo Del Valle, Antonio A. Márquez, Rafael M. Gasca, M. Toro	On Selecting and Scheduling Assembly Plans Using Constraint Programming	Yes	[414]	2003	KES 2003	8	530	803
Vilim03 Vilim03	P. Vilím	Computing Explanations for Global Scheduling Constraints	Yes	[422]	2003	CP 2003	1	534	804
Wolf03 Wolf03	A. Wolf	Pruning while Sweeping over Task Intervals	Yes	[443]	2003	CP 2003	15	547	805
Bartak02 Bartak02	R. Barták	Visopt ShopFloor: On the Edge of Planning and Scheduling	Yes	[34]	2002	CP 2002	16	304	806
Bartak02a Bartak02a	R. Barták	Visopt ShopFloor: Going Beyond Traditional Scheduling	Yes	[33]	2002	ERCIM/CologNet 2002	15	305	807
BeldiceanuC02 BeldiceanuC02	N. Beldiceanu, M. Carlsson	A New Multi-resource cumulatives Constraint with Negative Heights	Yes	[49]	2002	CP 2002	17	311	808
ElkhyariGJ02 ElkhyariGJ02	A. Elkhyari, C. Guéret, N. Jussien	Conflict-Based Repair Techniques for Solving Dynamic Scheduling Problems	Yes	[127]	2002	CP 2002	6	361	809
ElkhyariGJ02a ElkhyariGJ02a	A. Elkhyari, C. Guéret, N. Jussien	Solving Dynamic Resource Constraint Project Scheduling Problems Using New Constraint Programming Tools	Yes	[128]	2002	PATAT 2002	24	362	810
HookerY02 HookerY02	John N. Hooker, H. Yan	A Relaxation of the Cumulative Constraint	Yes	[209]	2002	CP 2002	5	414	811
KamarainenS02 KamarainenS02	O. Kamarainen, Hani El Sakkout	Local Probing Applied to Scheduling	Yes	[219]	2002	CP 2002	17	421	812
Muscettola02 Muscettola02	N. Muscettola	Computing the Envelope for Stepwise-Constant Resource Allocations	Yes	[312]	2002	CP 2002	16	478	813
Vilim02 Vilim02	P. Vilím	Batch Processing with Sequence Dependent Setup Times	Yes	[421]	2002	CP 2002	1	533	814
ZhuS02 ZhuS02	Kenny Qili Zhu, Andrew E. Santosa	A Meeting Scheduling System Based on Open Constraint Programming	Yes	[464]	2002	CAiSE 2002	5	558	815
VanczaM01 VanczaM01	J. Váncza, A. Márkus	A Constraint Engine for Manufacturing Process Planning	Yes	[419]	2001	CP 2001	15	531	816
VerfaillieL01 VerfaillieL01	G. Verfaillie, M. Lemaître	Selecting and Scheduling Observations for Agile Satellites: Some Lessons from the Constraint Reasoning Community Point of View	Yes	[420]	2001	CP 2001	15	532	817
AngelsmarkJ00 AngelsmarkJ00	O. Angelsmark, P. Jonsson	Some Observations on Durations, Scheduling and Allen's Algebra	Yes	[11]	2000	CP 2000	5	289	818
FocacciLN00 FocacciLN00	F. Focacci, P. Laborie, W. Nuijten	Solving Scheduling Problems with Setup Times and Alternative Resources	Yes	[140]	2000	AIPS 2000	10	365	819
KorbaaYG99 KorbaaYG99	O. Korbaa, P. Yim, J. Gentina	Solving transient scheduling problem for cyclic production using timed Petri nets and constraint programming	Yes	[235]	1999	ECC 1999	8	431	820

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Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
CestaOS98 CestaOS98	A. Cesta, A. Oddi, Stephen F. Smith	Scheduling Multi-capacitated Resources Under Complex Temporal Constraints	Yes	[93]	1998	CP 1998	1	340	821
FrostD98 FrostD98	D. Frost, R. Dechter	Optimizing with Constraints: A Case Study in Scheduling Maintenance of Electric Power Units	Yes	[147]	1998	CP 1998	1	371	822
GruianK98 GruianK98	F. Gruian, K. Kuchcinski	Operation Binding and Scheduling for Low Power Using Constraint Logic Programming	Yes	[180]	1998	EUROMICRO 1998	8	396	823
PembertonG98 PembertonG98	Joseph C. Pemberton, Flavius Galiber III	A constraint-based approach to satellite scheduling	Yes	[338]	1998	DIMACS 1998	14	489	824
RodosekW98 RodosekW98	R. Rodosek, M. Wallace	A Generic Model and Hybrid Algorithm for Hoist Scheduling Problems	Yes	[360]	1998	CP 1998	15	502	825
BaptisteP97 BaptisteP97	P. Baptiste, Claude Le Pape	Constraint Propagation and Decomposition Techniques for Highly Disjunctive and Highly Cumulative Project Scheduling Problems	Yes	[29]	1997	CP 1997	15	302	826
BeckDF97 BeckDF97	J. Christopher Beck, Andrew J. Davenport, Mark S. Fox	Five Pitfalls of Empirical Scheduling Research	Yes	[42]	1997	CP 1997	15	309	827
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	[79]	1997	PACT 1997	18	No	828
Caseau97 Caseau97	Y. Caseau	Using Constraint Propagation for Complex Scheduling Problems: Managing Size, Complex Resources and Travel	Yes	[91]	1997	CP 1997	4	338	829
PapeB97 PapeB97	Claude Le Pape, P. Baptiste	A Constraint Programming Library for Preemptive and Non-Preemptive Scheduling	No	[335]	1997	PACT 1997	20	No	830
BrusoniCLMMT96 BrusoniCLMMT96	V. Brusoni, L. Console, E. Lamma, P. Mello, M. Milano, P. Terenziani	Resource-Based vs. Task-Based Approaches for Scheduling Problems	Yes	[85]	1996	ISMIS 1996	10	334	831
Colombani96 Colombani96	Y. Colombani	Constraint Programming: an Efficient and Practical Approach to Solving the Job-Shop Problem	Yes	[102]	1996	CP 1996	15	347	832
Zhou96 Zhou96	J. Zhou	A Constraint Program for Solving the Job-Shop Problem	Yes	[461]	1996	CP 1996	15	556	833
Goltz95 Goltz95	H. Goltz	Reducing Domains for Search in CLP(FD) and Its Application to Job-Shop Scheduling	Yes	[172]	1995	CP 1995	14	389	834
Puget95 Puget95	J. Puget	Applications of Constraint Programming	Yes	[353]	1995	CP 1995	4	497	835
Simonis95 Simonis95	H. Simonis	The CHIP System and Its Applications	Yes	[386]	1995	CP 1995	4	514	836
SimonisC95 SimonisC95	H. Simonis, T. Cornelissens	Modelling Producer/Consumer Constraints	Yes	[388]	1995	CP 1995	14	515	837
Touraivane95 Touraivane95	Touraïvane	Constraint Programming and Industrial Applications	Yes	[411]	1995	CP 1995	3	529	838
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	[215]	1994	ILPS 1994	1	No	839
NuijtenA94 NuijtenA94	W. P. M. Nuijten, Emile H. L. Aarts	Constraint Satisfaction for Multiple Capacitated Job Shop Scheduling	Yes	[326]	1994	ECAI 1994	5	482	840
Wallace94 Wallace94	M. Wallace	Applying Constraints for Scheduling	No	[433]	1994	Constraint Programming 1994	19	No	841
BaptisteLV92 BaptisteLV92	P. Baptiste, B. Legeard, C. Varnier	Hoist scheduling problem: an approach based on constraint logic programming	Yes	[31]	1992	ICRA 1992	6	301	842
ErtlK91 ErtlK91	M. Anton Ertl, A. Krall	Optimal Instruction Scheduling using Constraint Logic Programming	Yes	[129]	1991	PLILP 1991	12	363	843

2.2 Extracted Concepts

Table 3: Automatically Extracted PAPER Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
AalianPG23 [1]	16	scheduling, preempt, activity, flow-shop, order, transportation, machine, make-span, resource		cycle, alwaysIn, cumulative, noOverlap, endBeforeStart		CPO, Cplex	steel cable	mining industry	real-world		1	561
AbrilSB05 [3]	1	distributed, scheduling, multi-agent, order					railway				212	772
Acuna-AgostMFG09 [4]	2	re-scheduling, order, scheduling, transportation					railway		Roadef		176	736
AkkerDH07 [415]	15	resource, due-date, scheduling, make-span, precedence, order, cmax, completion-time, machine, job, lateness, release-date, sequence dependent setup, preempt	RCPSP, single machine, parallel machine	cumulative		Cplex					196	756
AlesioNBG14 [119]	18	preempt, job-shop, distributed, scheduling, completion-time, make-span, resource, open-shop, order, job, activity, task		alldifferent		OPL, Cplex	automotive		benchmark		121	681
AngelsmarkJ00 [11]	5	resource, job, order, scheduling, task, job-shop									258	818
AntuoriHHEN21 [12]	16	release-date, resource, transportation, job, order, due-date, tardiness, scheduling, machine, task, job-shop, precedence		cycle	C++, Java	Choco Solver, Gecode	automotive, car manufacturing, drone	automotive industry	gitlab, supplementary material		30	590
ArbaouiY18 [13]	10	setup-time, order, machine, make-span, sequence dependent setup, completion-time, cmax, resource, job, scheduling	single machine, parallel machine	alternative constraint, noOverlap, cumulative	C++	OZ, Cplex			benchmark		65	625
ArmstrongGOS21 [14]	18	machine, transportation, flow-shop, job-shop, scheduling, job, make-span, order, completion-time, sequence dependent setup, preempt, resource, setup-time, precedence, task, cmax	HFF	alternative constraint, cycle, table constraint, circuit, diffn, bin-packing, cumulative	Java, Prolog	OZ, MiniZinc, CPO, Chuffed, Gecode, SICStus, Cplex, CHIP	robot	packaging industry	instance generator, industry partner, zenodo, supplementary material, real-world, industrial partner, benchmark	energetic reasoning	31	591
ArmstrongGOS22 [15]	13	machine, transportation, flow-shop, scheduling, job, re-scheduling, make-span, order, completion-time, resource, task, cmax	HFF, parallel machine	noOverlap, cumulative	Prolog	OZ, OPL, SICStus			real-world, benchmark		16	576
AronssonBK09 [16]	13	job-shop, transportation, order, job, task		cumulative	Prolog	Cplex, CHIP	railway		real-world, real-life	sweep	177	737
ArtiguesBF04 [17]	13	job, batch process, cmax, make-span, release-date, resource, precedence, completion-time, sequence dependent setup, job-shop, setup-time, preempt, scheduling, order, machine		disjunctive	C++	Ilog Scheduler, Ilog Solver			benchmark	edge-finding	229	789

Table 3: Automatically Extracted PAPER Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
ArtiouchineB05 [19]	15	re-scheduling, release-date, scheduling, order, completion-time, job, resource, make-span, activity, preempt, open-shop, machine, precedence, job-shop	parallel machine, single machine	disjunctive, cumulative		Ilog Scheduler	aircraft		generated instance, random instance	not-last, edge-finding, not-first	213	773
Astrand0F21 [21]	18	resource, open-shop, task, machine, precedence, job-shop, make-span, order, job, activity, scheduling		cycle, disjunctive		Gecode	farming, drone, forestry, robot, satellite, agriculture	potash industry, mining industry, mineral industry	benchmark, real-world, real-life, generated instance		32	592
AstrandJZ18 [22]	9	resource, task, machine, make-span, order, activity, scheduling	single machine	disjunctive, cumulative, cycle		Gecode	hoist, robot	potash industry		time-tabling	66	626
BadicaBIL19 [25]	11	completion-time, resource, order, activity, machine, multi-agent, distributed, make-span, scheduling		cycle		ECLiPSe, Gecode			github		50	610
Baptiste09 [26]	1	scheduling									178	738
BaptisteLV92 [31]	6										282	842
BaptisteP97 [29]	15	resource, task, preempt, precedence, release-date, flow-shop, job-shop, scheduling, re-scheduling, make-span, order, job, activity, due-date	RCPSP	disjunctive, cumulative	C++	Claire, CHIP			benchmark	edge-finding, edge-finder	266	826
BarlattCG08 [32]	5	scheduling, resource, setup-time, job, task, machine, flow-shop, job-shop, transportation					automotive, pipeline		real-world		187	747
Bartak02 [34]	16	make-span, scheduling, machine, continuous-process, job, resource, activity, lateness, job-shop, task, precedence, earliness, order		disjunctive, cumulative	Prolog	SICStus, OZ	dairies		real-life	edge-finding, time-tabling	246	806
Bartak02a [33]	15	activity, re-scheduling, earliness, job-shop, resource, scheduling, make-span, task, precedence, order, machine, tardiness, job		cumulative, disjunctive		Ilog Scheduler	dairies		benchmark, real-life	time-tabling, edge-finding	247	807
BartakV15 [39]	12	job-shop, resource, scheduling, make-span, precedence, order, machine, job, lateness, activity, re-scheduling, setup-time							real-world, real-life	sweep	103	663
BartoliniBBLM14 [40]	16	resource, tardiness, task, job, activity, make-span, machine, scheduling		alternative constraint, cumulative			super-computer				122	682
BarzegaranZP20 [41]	9	re-scheduling, resource, distributed, machine, task, scheduling, order			Java	OR-Tools	automotive, robot				41	601
BeckDF97 [42]	15	precedence, release-date, due-date, re-scheduling, make-span, order, scheduling, resource, inventory, machine, job, job-shop, task, activity	single machine	cycle, cumulative			robot		benchmark, real-world	edge-finding	267	827

Table 3: Automatically Extracted PAPER Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
BehrensLM19 [46]	7	order, setup-time, resource, task, machine, distributed, multi-agent, scheduling, make-span			Python	OR-Tools, MiniZinc, OZ	robot		real-world, github		51	611
BeldiceanuC02 [49]	17	order, producer/consumer, scheduling, machine, task, resource, activity	single machine	cumulative	Prolog	SICStus, CHIP, OZ	crew-scheduling		real-life, random instance, benchmark	sweep	248	808
BeldiceanuCP08 [51]	15	resource, task, scheduling, order		geost, cumulative, disjunctive	Prolog	SICStus, CHIP, OPL	rectangle-packing, perfect-square		benchmark	edge-finding, sweep	188	748
BeldiceanuP07 [52]	15	preempt, scheduling, release-date, task, resource, order, due-date		cumulative, disjunctive						sweep	197	757
BenderWS21 [54]	16	preempt, activity, task, order, machine, make-span, job, distributed, resource, setup-time, scheduling	RCPSP	noOverlap	Python		agriculture				33	593
BenediktSMVH18 [56]	10	job-shop, scheduling, order, job, preempt, resource, machine	single machine, parallel machine	noOverlap		OZ, Gurobi	energy-price		github, random instance, generated instance		67	627
BeniniBGM06 [57]	15	activity, task, distributed, tardiness, precedence, scheduling, make-span, resource, order, setup-time		cycle, cumulative		ECLiPSe, Cplex, Ilog Solver, OZ	automotive, pipeline		real-life		206	766
BertholdHLMS10 [60]	5	precedence, scheduling, order, completion-time, job, resource, preempt	psplib, RCPSP	disjunctive, cumulative		Cplex, Z3					168	728
BessiereHMQW14 [61]	16	scheduling, order, job, resource, setup-time, task, machine		alldifferent, cycle		Choco Solver	satellite	textile industry	benchmark, real-life		123	683
BillautHL12 [62]	15	tardiness, precedence, release-date, flow-shop, job-shop, make-span, order, setup-time, job, scheduling, completion-time, due-date, resource, open-shop, machine, cmax	single machine	cycle		Mistral, Cplex			random instance		144	704
Bit-Monnot23 [63]	8	precedence, scheduling, machine, distributed, order, job, make-span, open-shop, task, lazy clause generation, job-shop, resource, activity	Open Shop Scheduling Problem, OSP	cycle, cumulative, disjunctive		OR-Tools, MiniZinc, CPO, Mistral			real-world, github, benchmark		2	562
BofillCSV17 [66]	9	machine, preempt, cmax, lazy clause generation, precedence, scheduling, make-span, resource, order, activity	RCPSP, psplib	cumulative		Z3			benchmark	energetic reasoning	78	638
BofillEGPSV14 [67]	16	order, scheduling, lazy clause generation, machine, task				Cplex, Gecode, MiniZinc			industrial instance	time-tabling	124	684
BofillGSV15 [68]	9	machine, scheduling, order				Cplex			industrial instance	time-tabling	104	664

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
BogaerdtW19 [416]	16	scheduling, completion-time, order, setup-time, job, machine, job-shop, tardiness, precedence	single machine, parallel machine	noOverlap	C	OPL, Cplex	railway		benchmark		52	612
BonfiettiLBM11 [70]	15	scheduling, order, job, resource, make-span, activity, machine, precedence, task, job-shop	RCPSP	cumulative, cycle		Ilog Solver	hoist, robot		generated instance, industrial instance, benchmark		155	715
BonfiettiLBM12 [71]	16	scheduling, order, job, resource, make-span, activity, distributed, machine, precedence, job-shop	RCPSP	cumulative, cycle		Ilog Solver	hoist, robot		benchmark	time-tabling	145	705
BonfiettiLM13 [73]	5	make-span, job-shop, precedence, resource, activity, job, order, scheduling	RCPSP	cumulative, cycle		Cplex					134	694
BonfiettiLM14 [74]	16	make-span, machine, task, job-shop, precedence, open-shop, resource, activity, job, distributed, order, scheduling	RCPSP, psplib	cumulative					real-world, benchmark		125	685
BonfiettiM12 [75]	3	job, task, precedence, job-shop, resource, activity, scheduling, machine	RCPSP	cumulative			hoist		industrial instance		146	706
BonfiettiZLM16 [76]	17	resource, make-span, activity, precedence, scheduling, order	RCPSP	cumulative, cycle, disjunctive		OR-Tools	automotive	automotive industry, control system industry	generated instance, github, industrial instance, benchmark, real-world	edge-finder, sweep	89	649
BoothNB16 [77]	17	distributed, resource, scheduling, task, machine, precedence, order, activity, re-scheduling		disjunctive, cumulative, noOverlap	C++	Cplex	robot, medical		real-world		90	650
BoudreaultSLQ22 [80]	16	lazy clause generation, order, activity, make-span, machine, scheduling, cmax, transportation, distributed, resource, preempt, precedence, task	RCPSP, psplib	disjunctive, cumulative		Chuffed, MiniZinc, OR-Tools, OPL	offshore	ship repair industry	benchmark, generated instance, supplementary material, gitlab, real-life, industrial partner, github, real-world	not-last, energetic reasoning, edge-finding, not-first	17	577
BridiLBBM16 [84]	2	resource, task, machine, distributed, make-span, order, job, activity, scheduling									91	651
BrusoniCLMMT96 [85]	10	resource, activity, precedence, task, distributed, due-date, job-shop, scheduling, order, job		disjunctive	Prolog		railway				271	831
BurtLPS15 [86]	17	task, machine, precedence, order, tardiness, job, job-shop, resource, scheduling, make-span, completion-time	parallel machine, single machine	cumulative, cycle		Cplex, Gurobi, Gecode, MiniZinc			real-world, benchmark, industry partner		105	665

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
CappartS17 [89]	16	machine, activity, job, precedence, re-scheduling, resource, job-shop, scheduling, task, order, completion-time	TMS	cumulative, noOverlap, alternative constraint, span constraint		OPL, OZ	railway		bitbucket, random instance, real-life		79	639
CarchraeBF05 [90]	1	scheduling, order, task, make-span									214	774
Caseau97 [91]	4	preempt, make-span, order, scheduling, job, resource, job-shop, task		cumulative				robot	benchmark	edge-finding	269	829
CauwelaertDMS16 [92]	16	batch process, task, job, job-shop, order, activity, make-span, machine, scheduling, completion-time, setup-time, resource, sequence dependent setup, preempt, precedence		cumulative, disjunctive	Java		container terminal		real-life, bitbucket, benchmark	not-last, edge-finding, not-first	92	652
CestaOS98 [93]	1	resource, scheduling, job					robot				261	821
ChapadosJR11 [94]	6	activity, scheduling, order, task		cycle, cumulative		OPL		retail industry		time-tabling	156	716
ChuX05 [95]	15	scheduling, machine, resource, job, release-date, order, due-date, completion-time	single machine	disjunctive, cumulative		ECLiPSe					215	775
CireCH13 [96]	7	make-span, tardiness, scheduling, machine, job, resource, precedence, task, order		circuit, cumulative		OPL, Cplex, OZ					135	695
ClercqPBJ11 [97]	16	resource, order, activity, due-date, release-date, distributed, precedence, scheduling, completion-time		alldifferent, cumulative	Java	CHIP, Choco Solver			benchmark	time-tabling, sweep, energetic reasoning, edge-finding	157	717
CobanH10 [98]	5	distributed, tardiness, job, preempt, re-scheduling, make-span, order, scheduling		circuit, disjunctive		OPL, Cplex					169	729
ColT19 [100]	17	earliness, order, scheduling, precedence, make-span, machine, resource, job, job-shop	JSSP	noOverlap, disjunctive	Java	MiniZinc, CPO, OR-Tools			github, benchmark, real-world		53	613
Colombani96 [102]	15	job, scheduling, resource, order, task, preempt, activity, due-date, machine, precedence, release-date, job-shop		disjunctive		CHIP					272	832
DannaP03 [104]	5	machine, job, job-shop, activity, earliness, order, tardiness, scheduling, resource		disjunctive		Cplex, Ilog Solver, Ilog Scheduler			benchmark		240	800
Davenport10 [106]	5	resource, release-date, tardiness, scheduling, completion-time, order, earliness, due-date				Cplex	semiconductor				170	730
DavenportKRSH07 [107]	13	make to order, activity, machine, sequence dependent setup, preempt, precedence, resource, inventory, job-shop, order, scheduling, job, setup-time		disjunctive, bin-packing	C++	Cplex, CHIP		steel industry			198	758

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
DejemeppeCS15 [112]	16	completion-time, tardiness, job-shop, scheduling, sequence dependent setup, make-span, machine, release-date, task, precedence, setup-time, job, resource, order, preempt, activity	single machine	disjunctive, cumulative, cycle			container terminal		real-world, bitbucket, generated instance, benchmark	not-last, not-first, edge-finding	106	666
DejemeppeD14 [113]	9	make-span, precedence, job-shop, resource, activity, setup-time, scheduling, order, job		cumulative			medical, patient		bitbucket		126	686
DemirovicS18 [115]	18	scheduling, order, task, resource, activity, precedence		cumulative, disjunctive		MiniZinc, Gurobi, OZ			real-world, benchmark	time-tabling	68	628
DerrienP14 [117]	9	resource, scheduling, activity, order, make-span	psplib, CuSP	cumulative	Java	Choco Solver			random instance	sweep, edge-finding, energetic reasoning	127	687
DerrienPZ14 [118]	9	re-scheduling, make-span, scheduling, resource, order, job, activity, machine, precedence	RCPSP, CuSP	cumulative		Choco Solver, CHIP			benchmark, random instance, real-world	sweep	128	688
DilkinaDH05 [120]	5	machine, precedence, job-shop, make-span, job, scheduling, order				OPL					216	776
DoomsH08 [122]	16	scheduling, resource, completion-time, machine, job, job-shop, activity, task, order	RCPSP					services industry			189	749
DoulabiRP14 [123]	9	activity, scheduling, due-date, resource, task, order		bin-packing		Cplex	nurse, medical, patient				129	689
EdisO11 [125]	7	task, job, completion-time, activity, lateness, earliness, resource, make-span, scheduling, flow-time, preempt, tardiness, due-date, machine	parallel machine	bin-packing, noOverlap, cumulative		OPL, OZ, Cplex					158	718
EfthymiouY23 [126]	16	order, job, make-span, re-scheduling, task, job-shop, scheduling, machine, setup-time	CHSP, JSSP	cumulative, disjunctive, cycle	Python	OPL, OR-Tools	pipeline, hoist, electroplating, satellite		benchmark, random instance, generated instance, real-life, industrial instance		3	563
ElkhyariGJ02 [127]	6	resource, activity, precedence, scheduling, machine, due-date, preempt, make-span, re-scheduling, task	RCPSP	cumulative, disjunctive, table constraint							249	809
ElkhyariGJ02a [128]	24	activity, re-scheduling, order, due-date, scheduling, task, precedence, open-shop, resource	RCPSP, psplib	cumulative, disjunctive		OZ, OPL			benchmark, real-life	time-tabling	250	810
ErtlK91 [129]	12	setup-time, resource, scheduling, order, machine, task		cycle	Prolog		pipeline		real-world, benchmark		283	843
EvenSH15 [131]	18	preempt, transportation, order, scheduling, machine, distributed, resource, completion-time, task		disjunctive, cumulative		OPL, Choco Solver	emergency service		real-life, real-world	sweep	107	667

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
FocacciLN00 [140]	10	due-date, task, machine, preempt, job-shop, distributed, cmax, precedence, scheduling, make-span, sequence dependent setup, resource, open-shop, order, setup-time, job, activity		disjunctive					real-world	edge-finding	259	819
FontaineMH16 [141]	11	order, machine, job, task, completion-time, make-span, job-shop, resource, precedence, scheduling	parallel machine	disjunctive		MiniZinc, Gurobi, CHIP			benchmark		93	653
FortinZDF05 [142]	15	resource, order, task, activity, temporal constraint reasoning, precedence, make-span, scheduling	psplib								217	777
FrankK05 [143]	18	order, scheduling, job, resource, due-date, task, precedence		cycle			satellite, aircraft		benchmark		218	778
FrimodigS19 [145]	17	resource, order, task, machine, job-shop, job, scheduling		regular expression, cumulative, bin-packing	Python	Gecode, Cplex, MiniZinc, OZ	radiation therapy, medical, patient, nurse, physician		benchmark, real-world		54	614
FrohnerTR19 [146]	9	scheduling, order, distributed			Java, Python	MiniZinc, Gecode, Gurobi	nurse		benchmark, real-world		55	615
FrostD98 [147]	1	order, scheduling						power industry			262	822
GalleguillosKSB19 [148]	18	re-scheduling, machine, distributed, resource, order, activity, job, scheduling, make-span	JSSP	cumulative, alternative constraint	Python	OR-Tools, OZ	super-computer, datacenter				56	616
GarganiR07 [149]	13	order, machine, resource, inventory		bin-packing	C++	OPL	steel mill	steel industry	real-life, CSPlib		199	759
GayHLS15 [152]	9	precedence, task, order, make-span, resource, scheduling, activity	OSP, psplib, RCPSP	cumulative, disjunctive					benchmark, bitbucket	edge-finding, time-tabling	108	668
GayHS15 [153]	9	scheduling, precedence, resource, preempt, task, order		cumulative, table constraint, disjunctive		Choco Solver, OR-Tools, Gecode			bitbucket	time-tabling, sweep	109	669
GayHS15a [154]	16	manpower, task, order, preempt, resource, scheduling, machine	psplib, RCPSP	cumulative, disjunctive	Java				benchmark, bitbucket, real-world	time-tabling, not-first, not-last, energetic reasoning, edge-finding, sweep	110	670
GaySS14 [155]	15	machine, job, completion-time, activity, order, setup-time, make-span, scheduling, precedence, manpower, continuous-process, resource, job-shop		cycle, cumulative, disjunctive			steel mill		real-life, CSPlib	sweep	131	691

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GeibingerKKMMW21 [157	10	distributed, scheduling				MiniZinc, OR-Tools, Gurobi, Cplex, Gecode	nurse, physician, COVID, medical, patient	pharmaceutical industry	real-world		34	594
GeibingerMM19 [159]	16	precedence, release-date, resource, activity, re-scheduling, job, order, due-date, completion-time, scheduling, make-span, task	RCPSP	alternative constraint, noOverlap, cumulative, endBeforeStart	Java	CPO, Cplex, Gecode, MiniZinc	automotive		real-life, generated instance, industrial partner, real-world, benchmark	time-tabling	57	617
GeibingerMM21 [160]	9	lazy clause generation, precedence, release-date, resource, activity, job, order, due-date, completion-time, tardiness, scheduling, machine, task	RCPSP	disjunctive, cumulative		CPO, Chuffed, Cplex	nurse		real-life, github, generated instance, real-world, benchmark	time-tabling	35	595
GeitzGSSW22 [161]	18	make-span, order, setup-time, job, scheduling, completion-time, sequence dependent setup, resource, task, machine, preempt, producer/consumer, lateness, lazy clause generation, precedence, job-shop, batch process, transportation	single machine, RCPSP, JSSP	cumulative		OZ, OPL	robot		real-life, github, real-world	not-last, sweep	18	578
GelainPRVW17 [162]	16	resource, scheduling, order							CSPlib, real-life, benchmark		80	640
Geske05 [163]	18	machine, task, re-scheduling, job, activity, order, distributed, resource, scheduling, lateness, job-shop		cumulative	Prolog	CHIP, SICStus	railway		real-life		219	779
GilesH16 [164]	16	inventory, setup-time, activity, task, transportation, order, scheduling, resource		cumulative, disjunctive		Cplex	pipeline	petro-chemical industry, chemical processing industry, chemical industry			94	654
GingrasQ16 [165]	7	resource, scheduling, task, order, make-span, completion-time, precedence	psplib, CuSP, RCPSP	disjunctive, cumulative		Choco Solver			benchmark	sweep, edge-finder, edge-finding, energetic reasoning	95	655
GodardLN05 [166]	9	scheduling, activity, order, completion-time, earliness, machine, make-span, job, precedence, tardiness, resource, job-shop	JSSP	table constraint, cumulative, disjunctive		OZ, Ilog Scheduler, Ilog Solver			benchmark		220	780
GodetLHS20 [168]	8	lazy clause generation, setup-time, release-date, scheduling, task, order, machine, make-span, cmax, completion-time, resource, job	parallel machine, PMSP, single machine	alldifferent, bin-packing, cumulative, disjunctive		OZ, Choco Solver, CHIP, Chuffed	satellite		github, real-life, benchmark, generated instance	not-last, time-tabling	42	602

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GoldwaserS17 [171]	16	scheduling, machine, transportation, due-date, order, lazy clause generation, resource		cumulative, disjunctive	Python	Gurobi, Gecode	torpedo	steel industry	instance generator, github, generated instance		81	641
Goltz95 [172]	14	due-date, machine, task, job, completion-time, order, resource, scheduling, precedence, job-shop		cumulative, disjunctive	Prolog	CHIP			benchmark	edge-finding	274	834
GomesHS06 [173]	2	scheduling, distributed, task, multi-agent, order				Ilog Solver			real-life		207	767
GrimesH10 [174]	15	cmax, machine, job, setup-time, job-shop, flow-shop, sequence dependent setup, open-shop, task, batch process, resource, scheduling, make-span, precedence, order	Open Shop Scheduling Problem	disjunctive, cumulative, cycle		OZ		steel industry	benchmark	time-tabling, edge-finding	171	731
GrimesH11 [175]	17	cmax, completion-time, machine, tardiness, job, release-date, earliness, lazy clause generation, job-shop, flow-shop, open-shop, task, due-date, resource, scheduling, make-span, precedence, order	RCPSP	disjunctive, cumulative		Cplex, Ilog Scheduler, Ilog Solver, OZ, OPL			benchmark	edge-finding	159	719
GrimesHM09 [176]	9	make-span, resource, job, precedence, open-shop, scheduling, task, order, job-shop, machine	Open Shop Scheduling Problem, OSP	disjunctive	Java	Choco Solver, Ilog Scheduler, Mistral			benchmark	not-last, edge-finding	179	739
GroleazNS20 [179]	17	tardiness, precedence, release-date, job-shop, setup-time, job, scheduling, resource, order, machine, inventory, preempt, due-date	GCSP	noOverlap, cycle, cumulative, circuit		CPO, OR-Tools		food industry	benchmark, industrial instance		43	603
GroleazNS20a [178]	9	scheduling, machine, inventory, transportation, due-date, distributed, order, tardiness, job, release-date, precedence, resource, setup-time, preempt	parallel machine, RCPSP	cycle, noOverlap, cumulative		Cplex, CPO		food industry	industrial partner, benchmark		44	604
GruianK98 [180]	8	task, resource, scheduling, order, activity, re-scheduling		cumulative, cycle, diffn, circuit		OPL, CHIP	pipeline, aircraft		benchmark		263	823
GuSS13 [181]	7	lazy clause generation, activity, order, distributed, scheduling, precedence, make-span, machine, resource	single machine	cumulative					benchmark	edge-finding, edge-finder, time-tabling	136	696
HanenKP21 [186]	17	job-shop, resource, scheduling, make-span, completion-time, task, machine, precedence, order, cmax, tardiness, job, lateness, preempt, release-date, due-date	RCPSP, CuSP, parallel machine	cumulative	Python	Claire	pipeline		Roadef, generated instance, random instance	energetic reasoning	36	596
He0GLW18 [188]	18	distributed, machine, precedence, re-scheduling, transportation, multi-agent, order, scheduling			Python	Gurobi	real-time pricing, energy-price		real-world, bitbucket		69	629
HebrardTW05 [189]	1	order, job, machine, job-shop, scheduling									221	781

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HechingH16 [190]	11	re-scheduling, job, task, order, scheduling, manpower		circuit, noOverlap		OPL, Cplex, OZ	patient, medical		real-world		96	656
HeinzB12 [191]	17	activity, precedence, release-date, due-date, earliness, order, tardiness, scheduling, resource, completion-time, machine, job	single machine	cycle, cumulative, alternative constraint		Cplex, Ilog Solver, Ilog Scheduler, OPL					147	707
HeinzKB13 [192]	16	release-date, job-shop, resource, scheduling, order, machine, tardiness, job	single machine	cumulative		OPL, Cplex					137	697
HeinzS11 [194]	10	preempt, order, scheduling, resource, completion-time, machine, job	psplib, RCPSP	disjunctive, cumulative		Cplex			benchmark	energetic reasoning, time-tabling	160	720
HentenryckM04 [199]	16	open-shop, resource, order, activity, job, due-date, completion-time, tardiness, scheduling, make-span, machine, task, job-shop, precedence		disjunctive, cycle, cumulative					benchmark		230	790
HentenryckM08 [200]	5	order		bin-packing			steel mill		CSPlib		190	750
HermenierDL11 [201]	15	precedence, distributed, resource, order, scheduling, completion-time, producer/consumer, machine, task		bin-packing, disjunctive, alldifferent, cumulative, cycle, table constraint		OZ, Choco Solver	datacenter				161	721
HillTV21 [202]	19	scheduling, machine, job, resource, activity, flow-shop, release-date, task, precedence, order, preempt, lazy clause generation, make-span	RCPSP, psplib, single machine	cycle, cumulative, alternative constraint					real-world		37	597
HoYCLLCLC18 [203]	6	resource, task, machine, distributed, re-scheduling, order, job, scheduling			C		nurse, medical, patient		real-world		70	630
HoeveGSL07 [418]	6	re-scheduling, job, precedence, distributed, resource, task, job-shop, multi-agent, scheduling, machine, order		disjunctive		Ilog Scheduler, Cplex			benchmark	edge-finding	200	760
Hooker04 [204]	12	machine, task, precedence, release-date, make-span, order, tardiness, scheduling, distributed, resource		cumulative, circuit, disjunctive		Cplex, OPL, Ilog Scheduler			random instance		231	791
Hooker05a [206]	14	release-date, due-date, resource, scheduling, make-span, task, precedence, order, machine, tardiness, job		circuit, cumulative, disjunctive		OPL, Cplex, Ilog Scheduler					222	782
Hooker17 [208]	14	job, due-date, order, tardiness, scheduling, resource		circuit		OZ			benchmark, random instance		82	642
HookerY02 [209]	5	resource, scheduling, order, machine, job	RCPSP	disjunctive, cumulative							251	811
HoundjiSWD14 [210]	16	precedence, resource, scheduling, machine, inventory, transportation, due-date, order	single machine	circuit					bitbucket, generated instance		132	692
IfrimOS12 [212]	16	task, order, machine, job, re-scheduling, distributed, due-date, resource, scheduling		disjunctive			datacenter, energy-price		real-life		148	708

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
JelinekB16 [214]	10	scheduling, task, order, completion-time		table constraint, cumulative	Prolog	OZ, SICStus, OPL			real-life		97	657
JungblutK22 [216]	4	distributed, machine, make-span, scheduling, resource, order, task, preempt		circuit		MiniZinc			benchmark, github, real-world		19	579
JuvinHHL23 [217]	16	cmax, resource, job, setup-time, scheduling, task, order, job-shop, due-date, machine, preempt, make-span, flow-shop, completion-time, precedence	JSSP, parallel machine	endBeforeStart, disjunctive, alldifferent, cumulative, noOverlap	C++	CPO, Mistral			supplementary material, github, benchmark	not-last, edge-finding, not-first	4	564
JuvinHL23 [218]	16	make-span, completion-time, task, precedence, order, cmax, machine, tardiness, job, setup-time, job-shop, flow-shop, scheduling		noOverlap, endBeforeStart		Cplex, CPO			real-world		5	565
KamarainenS02 [219]	17	machine, job-shop, resource, precedence, transportation, earliness, activity, job, order, preempt, scheduling	KRFP			ECLiPSe			real-world, benchmark		252	812
KameugneFGOQ18 [221]	17	resource, task, cmax, precedence, make-span, scheduling, order, completion-time	RCPSP, CuSP	cumulative, disjunctive	Java	CHIP, Choco Solver			benchmark, real-world	time-tabling, not-first, sweep, not-last, energetic reasoning	71	631
KameugneFND23 [222]	17	machine, resource, precedence, cmax, order, preempt, scheduling, make-span, completion-time, task, lazy clause generation	psplib, CuSP, RCPSP	disjunctive, cumulative	Java	CHIP, Choco Solver			benchmark	sweep, energetic reasoning, edge-finding, not-last, not-first, edge-finder, time-tabling	6	566
KameugneFSN11 [223]	15	job-shop, release-date, resource, precedence, job, order, preempt, scheduling, make-span, completion-time, task	RCPSP, psplib, CuSP	disjunctive, cumulative		Gecode			benchmark	edge-finding, not-last, not-first, time-tabling	162	722
KelarevaTK13 [226]	17	order, tardiness, make-span, re-scheduling, task, resource, lazy clause generation, activity, precedence, scheduling, inventory, transportation, setup-time	Liner Shipping Fleet Repositioning Problem, BPCTOP, LSFRP, Bulk Port Cargo Throughput Optimisation Problem	alldifferent		Cplex, MiniZinc, OZ	earth observation, shipping line, satellite		real-world		138	698

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
KeriK07 [228]	14	due-date, tardiness, temporal constraint reasoning, job, activity, order, earliness, make-span, scheduling, precedence, cmax, resource, job-shop	RCPSP	cycle	C++					edge-finding	201	761
KhemmoudjPB06 [230]	13	resource, stock level, distributed, order, scheduling		cycle, cumulative	C++	CHIP			real-world		208	768
KimCMLLP23 [231]	16	make-span, job, precedence, open-shop, distributed, tardiness, setup-time, earliness, job-shop, due-date, scheduling, order, transportation, machine	parallel machine, SCC	noOverlap	Python	Gurobi, OR-Tools		steel industry	real-world, benchmark, zenodo		7	567
KlankeBYE21 [232]	16	re-scheduling, make-span, order, job, activity, scheduling, completion-time, due-date, resource, task, machine, producer/consumer, job-shop, batch process		noOverlap, disjunctive, cumulative, circuit	Python	Gurobi, Cplex, CHIP, OR-Tools		food-processing industry	benchmark, random instance, real-life		38	598
KletzanderM17 [233]	15	scheduling, machine, resource, transportation, order	parallel machine			OZ	torpedo	steel industry			83	643
KorbaaYG99 [235]	8	job, resource, task, job-shop, scheduling, machine, flow-shop, order, transportation, make-span		cycle, circuit	Prolog	CHIP, Ilog Solver, OZ	robot, hoist				260	820
KoschB14 [237]	16	resource, completion-time, batch process, lateness, job-shop, release-date, due-date, multi-agent, order, cmax, make-span, scheduling, machine, distributed, job	single machine, RCPSP	cumulative, bin-packing, disjunctive	Java	Choco Solver, Cplex, OZ	semiconductor		benchmark		133	693
KovacsEKV05 [240]	1	scheduling, resource, setup-time, job, job-shop, precedence							real-life		223	783
KovacsTKSG21 [244]	17	resource, precedence, job-shop, due-date, preempt, scheduling, order, machine, tardiness, flow-shop, job, inventory, re-scheduling, task, distributed, release-date	RCPSP, single machine	cumulative		Gurobi, OR-Tools, Cplex			github, supplementary material, real-world, benchmark		39	599
KovacsV04 [242]	15	job, job-shop, resource, scheduling, make-span, task, machine, precedence, order	single machine	disjunctive, cumulative		Ilog Scheduler			industrial partner, benchmark, real-life	edge-finding	232	792
KovacsV06 [243]	13	tardiness, job, setup-time, earliness, job-shop, resource, scheduling, make-span, task, machine, precedence, order	RCPSP, single machine	cumulative		Ilog Scheduler	automotive		industrial partner, benchmark, generated instance		209	769
KreterSS15 [245]	17	scheduling, task, order, machine, preempt, activity, make-span, completion-time, resource, lazy clause generation	RCPSP, parallel machine	cumulative, diffn		Cplex, MiniZ-inc, CHIP, Chuffed			benchmark		111	671
KrogtLPHJ07 [417]	13	resource, order, job, inventory, activity, due-date, machine, job-shop, precedence, scheduling		circuit	Prolog	OPL	semiconductor aircraft		real-world		202	762

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
KucukY19 [249]	5	order, scheduling, distributed, resource, setup-time, sequence dependent setup, task		disjunctive, cycle, noOverlap		Cplex	satellite, earth observation		benchmark, generated instance	time-tabling	58	618
Kumar03 [248]	15	activity, order, scheduling, producer/consumer, resource		cycle						bi-partite matching, max-flow	241	801
Laborie09 [250]	15	task, precedence, order, machine, tardiness, job, activity, setup-time, release-date, inventory, earliness, sequence dependent setup, due-date, preempt, job-shop, resource, scheduling		noOverlap, endBeforeStart, alternative constraint, cumulative, disjunctive	C	OPL, CPO, OZ	aircraft, satellite		real-world, benchmark		180	740
Laborie18a [251]	9	resource, job, release-date, scheduling, task, due-date, machine, precedence		cumulative, alternative constraint		Ilog Scheduler, CPO, OPL			real-life, benchmark, real-world	energetic reasoning	72	632
LacknerMMWW21 [253]	18	release-date, flow-shop, batch process, setup-time, job, order, due-date, tardiness, scheduling, make-span, machine, task, lateness, earliness	parallel machine, OSP, single machine	noOverlap, cumulative, endBeforeStart		Chuffed, Cplex, OPL, CPO, OZ, OR-Tools, MiniZinc, Gurobi	semiconductor, oven scheduling	electronics industry, steel industry, manufacturing industry	random instance, industrial partner, benchmark, instance generator, real-life, supplementary material		40	600
LahimerLH11 [255]	14	resource, task, machine, preempt, cmax, precedence, make-span, order, job, scheduling, completion-time	parallel machine, RCPSP	disjunctive	C++	Ilog Scheduler			benchmark	energetic reasoning	163	723
LauLN08 [257]	5	order, distributed, inventory, resource, scheduling, flow-shop, transportation, job-shop, machine, job							benchmark, real-world		191	751
LetortBC12 [259]	16	order, machine, make-span, precedence, resource, scheduling, task	psplib	cumulative, geost, bin-packing	Java, Prolog	Choco Solver, CHIP, SICStus	datacenter		Roadef, benchmark, random instance	sweep, edge-finding	149	709
LetortCB13 [260]	16	machine, make-span, precedence, resource, scheduling, task, order	psplib, RCPSP	cumulative, disjunctive, bin-packing	Java, Prolog	Choco Solver, SICStus			Roadef, benchmark, random instance	energetic reasoning, sweep, edge-finding	139	699
LiFJZLL22 [262]	6	task, machine, tardiness, job, buffer-capacity, flow-time, setup-time, distributed, job-shop, batch process, transportation, flow-shop, scheduling, make-span, order, completion-time	single machine			OZ, OPL	robot		benchmark		20	580
LimBTBB15 [266]	15	job-shop, scheduling, multi-agent, order, machine, tardiness, job, re-scheduling, earliness				OPL	HVAC		benchmark	time-tabling	112	672
LimHTB16 [265]	18	machine, activity, re-scheduling, multi-agent, order, scheduling, distributed		cumulative		OPL	real-time pricing, HVAC, energy-price		real-world		98	658

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
LimRX04 [264]	5	scheduling, preempt, machine, job, completion-time, order, transportation				OZ	container terminal		generated instance		233	793
Limtanyakul07 [267]	6	make-span, task, machine, release-date, resource, precedence, job, order, scheduling, due-date		cumulative		OPL	robot		real-life	energetic reasoning	203	763
LiuCGM17 [270]	17	transportation, order, cmax, scheduling, machine, task, activity			Python	OR-Tools, OPL, MiniZinc		tourism industry	github		84	644
LiuJ06 [271]	5	make-span, task, order, scheduling, resource		cycle, disjunctive							210	770
LiuLH19 [269]	9	order, resource, scheduling				Choco Solver, OZ			CSPlib, benchmark	time-tabling	59	619
LombardiBM15 [272]	16	completion-time, job-shop, resource, activity, precedence, scheduling, machine, distributed, order, job, make-span, task	JSSP, RCPSP, psplib						benchmark, real-world		113	673
LombardiBMB11 [273]	17	resource, order, activity, completion-time, scheduling, make-span, machine, task, precedence	RCPSP	cycle, cumulative	C++		hoist		benchmark, industrial instance, real-life		164	724
LombardiM09 [274]	15	precedence, completion-time, make-span, order, activity, scheduling, resource, task, preempt	RCPSP			Ilog Solver			real-world, instance generator		181	741
LombardiM10 [276]	15	precedence, completion-time, make-span, order, activity, scheduling, resource, task	RCPSP	disjunctive, cumulative		Ilog Solver			real-world, benchmark		172	732
LombardiM13 [279]	2	precedence, make-span, order, activity, scheduling, resource, task	RCPSP, psplib								140	700
LuoB22 [285]	17	order, scheduling, resource, re-scheduling, machine, batch process, job, job-shop		diffn, bin-packing, alwaysIn, cumulative	Python	CHIP, Cplex	super-computer, railway, rectangle-packing		generated instance, github, real-life, real-world, industry partner, industrial instance		21	581
Madi-WambaB16 [286]	16	precedence, job, order, scheduling, task, resource		cumulative	Java	Choco Solver, CHIP			real-world, benchmark, random instance, generated instance		99	659
Madi-WambaLOBM17 [287]	8	machine, task, activity, re-scheduling, job, precedence, distributed, scheduling, order, resource		bin-packing, cumulative	Prolog	SICStus	datacenter		real-world	sweep	85	645
MakMS10 [288]	5	scheduling, due-date, order, machine, inventory, task, job, activity, transportation, precedence, resource		cycle							173	733

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
MalapertN19 [289]	17	make-span, scheduling, completion-time, sequence dependent setup, resource, order, setup-time, job, flow-time, task, machine, cmax	parallel machine, PMSP, PTC, single machine	noOverlap, alwaysIn, cumulative, alternative constraint		Cplex, CPO	semiconductor		generated instance, benchmark, industrial instance, Roadef		60	620
MaraveliasG04 [292]	20					OZ					234	794
Mehdizadeh-Somarin23 [295]	14	multi-agent, job-shop, completion-time, re-scheduling, tardiness, machine, scheduling, cmax, flow-shop, job, task, setup-time, precedence, order, make-span, preempt	parallel machine, JSSP, single machine		Python	Cplex, OZ	robot, COVID		random instance		8	568
MelgarejoLS15 [6]	17	tardiness, scheduling, machine, task, precedence, transportation, setup-time, resource, order, job	single machine	circuit, disjunctive, alldifferent, noOverlap, table constraint		OZ, Cplex			real-world, benchmark		114	674
Mercier-AubinGQ20 [299]	13	job, preempt, task, make-span, sequence dependent setup, setup-time, tardiness, precedence, resource, earliness, completion-time, machine, lazy clause generation, activity, job-shop, due-date, scheduling, order	RCPSP	cycle, circuit, cumulative, disjunctive	C++, Python	OPL, MiniZinc		textile industry, manufacturing industry	industrial instance, industrial partner		45	605
MoffittPP05 [300]	6	scheduling, resource, order, activity, machine, cmax, make-span	Temporal Constraint Satisfaction Problem	cycle, disjunctive							224	784
MonetteDD07 [302]	14	precedence, job-shop, make-span, job, scheduling, completion-time, resource, open-shop, order, preempt, no preempt, task, machine	Open Shop Scheduling Problem, OSP	disjunctive		Gecode			benchmark	not-last, not-first, edge-finding	204	764
MonetteDH09 [303]	8	precedence, release-date, job-shop, tardiness, make-span, job, scheduling, completion-time, resource, order, preempt, activity, earliness, distributed, due-date, task, machine		cycle, disjunctive, cumulative					benchmark	not-last	182	742
MossigeGSMC17 [306]	18	activity, job, distributed, order, completion-time, preempt, scheduling, make-span, machine, task, job-shop, resource, precedence	FJS, single machine, RCPSP	cumulative, cycle, disjunctive	Prolog	SICStus, CHIP	rectangle-packing, robot		industrial partner, real-world, benchmark, random instance, CSPlib, generated instance		86	646
MouraSCL08 [308]	16	scheduling, preempt, activity, order, transportation, inventory, precedence, distributed, resource		table constraint, disjunctive, cycle	C++	Ilog Solver, OZ, Ilog Scheduler	pipeline			max-flow	192	752
MouraSCL08a [307]	8	transportation, re-scheduling, order, scheduling, due-date, resource, inventory, distributed		disjunctive, cumulative	C++	Ilog Solver, Ilog Scheduler	pipeline		real-world, benchmark		193	753

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
MurinR19 [310]	16	job-shop, task, make-span, transportation, order, resource, scheduling, machine, setup-time, job, activity, completion-time, precedence	JSPT	noOverlap, alternative constraint, endBeforeStart		Cplex, OPL	patient, robot		real-life, benchmark, github		61	621
MurphyMB15 [311]	17	scheduling, task, order, machine, activity, re-scheduling, resource		cycle, circuit, cumulative, disjunctive	Java	Choco Solver			real-world		115	675
Muscettola02 [312]	16	job-shop, resource, activity, precedence, scheduling, order, job, cmax		cycle						edge-finding, max-flow	253	813
NattafM20 [316]	16	setup-time, resource, scheduling, make-span, order, completion-time, machine, job, flow-time	single machine, PMSP, parallel machine, PTC	cumulative, noOverlap		CPO, Cplex	semiconductor		benchmark, industrial instance		46	606
NishikawaSTT18 [318]	6	make-span, order, resource, activity, task, distributed, precedence, scheduling		alternative constraint, endBeforeStart		Cplex, OZ	pipeline, robot		real-world, benchmark		73	633
NishikawaSTT18a [319]	6	task, order, activity, make-span, scheduling, distributed, resource, precedence, re-scheduling		endBeforeStart, alternative constraint		OZ, Cplex	robot, nurse, pipeline		real-world, benchmark, real-life		74	634
NuijtenA94 [326]	5	precedence, resource, job-shop, scheduling, preempt, order, completion-time, machine, make-span, job	JSSP	disjunctive	C++	Ilog Solver, CPO				time-tabling	280	840
OddiPCC03 [328]	15	preempt, distributed, resource, scheduling, precedence, order, completion-time, task, machine, activity	single machine	cycle	Java		satellite, earth observation		benchmark		242	802
OuelletQ13 [329]	16	scheduling, task, order, preempt, make-span, completion-time, precedence, resource	CuSP, RCPSP, psplib	cumulative, disjunctive		Choco Solver			benchmark	edge-finding, not-first, edge-finder, energetic reasoning, not-last, time-tabling, sweep	141	701
OuelletQ18 [330]	18	scheduling, task, order, make-span, completion-time, precedence, resource	RCPSP, psplib	cumulative, disjunctive	Java	OZ, Choco Solver			benchmark, Roadef	edge-finding, not-first, energetic reasoning, not-last, time-tabling	75	635

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
OuelletQ22 [331]	17	scheduling, task, order, preempt, activity, completion-time, resource, lazy clause generation		cumulative, disjunctive	Java	MiniZinc, Choco Solver	nurse		github, benchmark, random instance	edge-finding, not-first, energetic reasoning, not-last, time-tabling, sweep	22	582
OujanaAYB22 [332]	6	distributed, due-date, tardiness, make to order, precedence, flow-shop, job-shop, batch process, buffer-capacity, make-span, setup-time, job, scheduling, completion-time, sequence dependent setup, resource, open-shop, order, task, machine, preempt	PMSP, parallel machine, FJS, HFF	span constraint, noOverlap, disjunctive		CPO, OPL	COVID, robot	food industry, steel industry	benchmark, industrial instance, real-world, real-life		23	583
ParkUJR19 [337]	8	task, machine, flow-time, order, cmax, tardiness, job, lateness, preempt, no preempt, distributed, due-date, job-shop, flow-shop, resource, scheduling, make-span, open-shop, completion-time	parallel machine, single machine	endBeforeStart, cycle, noOverlap					real-world		62	622
PembertonG98 [338]	14	job-shop, resource, activity, preempt, scheduling, machine, order, job, task		geost, cycle		Ilog Solver, OPL	satellite, robot				264	824
PerezGSL23 [339]	7	resource, inventory, scheduling, task, order, machine, activity, make-span, completion-time, transportation, re-scheduling		table constraint, cumulative		OPL	nurse, steel mill, container terminal		real-world, generated instance		9	569
PesantRR15 [341]	16	activity, transportation, lazy clause generation, scheduling, order		cumulative, table constraint		Gurobi, Gecode, Ilog Solver					116	676
PoderB08 [343]	8	resource, producer/consumer, release-date, task, activity, preempt, due-date, order, scheduling		cumulative		CHIP				sweep	194	754
PopovicCGNC22 [347]	15	order, completion-time, scheduling, make-span, machine, task, resource, transportation, activity	TMS	cumulative, alwaysIn, noOverlap	C++, Prolog	Cplex, SICStus, CHIP, OZ	pipeline	electricity industry			24	584
PovedaAA23 [349]	21	make-span, resource, job, precedence, lazy clause generation, release-date, task, job-shop, scheduling, preempt, activity, order	RCPSP	cumulative, disjunctive	Python	Chuffed, Cplex, MiniZinc, CPO	automotive, aircraft		real-world, github, benchmark, industrial instance, real-life		10	570
Pralet17 [350]	19	setup-time, job, activity, precedence, job-shop, due-date, order, sequence dependent setup, make-span, resource, scheduling, machine	RCPSP, psplib, JSSP	cycle, cumulative, disjunctive		CPO, Cplex, CHIP	satellite		benchmark		87	647

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
PraletLJ15 [351]	16	order, job-shop, activity, make-span, precedence, resource, job, due-date, scheduling, tardiness, task	JSSP	alternative constraint, noOverlap, cycle		CPO, Cplex	earth observation, satellite				117	677
Puget95 [353]	4	resource, job-shop, task, job, activity, order, scheduling, transportation, manpower		disjunctive		OPL			benchmark		275	835
QuSN06 [356]	4	task, scheduling, distributed, resource, precedence		circuit	Prolog	SICStus					211	771
QuirogaZH05 [357]	6	release-date, tardiness, precedence, flow-shop, scheduling, completion-time, make-span, resource, order, inventory, activity, earliness, due-date, flow-time, task, machine				Ilog Solver, OPL, OZ, Ilog Scheduler, ECLiPSe	robot				225	785
RendlPHPR12 [358]	17	re-scheduling, job, scheduling, order, machine, transportation			Java	OZ	medical, patient, nurse		real-world, CSPlib, benchmark		150	710
RiahiNS018 [359]	9	flow-shop, completion-time, job, scheduling, distributed, tardiness, setup-time, order, buffer-capacity, machine, make-span, sequence dependent setup							real-world, real-life, benchmark		76	636
RodosekW98 [360]	15	task, order, transportation, machine, activity, make-span, job, resource, scheduling		circuit, disjunctive, cycle	Prolog	OPL, CHIP, ECLiPSe, Cplex	hoist, electroplating		benchmark		265	825
RossiTHP07 [363]	15	resource, inventory, scheduling, distributed, stock level, order		cumulative, cycle		OPL, Choco Solver					205	765
Sadykov04 [366]	7	release-date, due-date, preempt, scheduling, completion-time, task, precedence, machine, job, lateness	parallel machine, single machine	disjunctive						edge-finding	235	795
SchuttCSW12 [371]	17	scheduling, resource, order, preempt, activity, lazy clause generation, precedence, make-span		cumulative		CHIP			benchmark		151	711
SchuttFS13 [373]	17	resource, job, lazy clause generation, scheduling, task, order, job-shop, machine, activity, make-span, completion-time, precedence	RCPSP, FJS	disjunctive, span constraint, alternative constraint, cumulative		MiniZinc			benchmark	time-tabling, energetic reasoning	142	702
SchuttFS13a [372]	17	make-span, scheduling, completion-time, resource, order, task, machine, preempt, activity, lazy clause generation, precedence	RCPSP, psplib	disjunctive, cumulative, circuit		CHIP, OZ			benchmark	not-last, edge-finding, energetic reasoning	143	703
SchuttFSW09 [374]	16	scheduling, resource, open-shop, order, task, machine, preempt, activity, lazy clause generation, precedence, make-span, job	psplib	disjunctive, cumulative		ECLiPSe, CHIP, SICStus, OZ			benchmark, real-world	edge-finder	183	743

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SchuttS16 [376]	17	machine, producer/consumer, precedence, order, inventory, lazy clause generation, activity, preempt, manpower, resource, scheduling, make-span	RCPSP	cumulative		Chuffed, MiniZinc, Ilog Scheduler, OPL			benchmark		100	660
SchuttW10 [377]	15	task, order, lazy clause generation, activity, preempt, release-date, due-date, resource, scheduling, make-span	psplib, CuSP, RCPSP	disjunctive, cumulative	Java	CHIP	rectangle-packing		benchmark	edge-finding, not-last, not-first	174	734
SerraNM12 [378]	17	preempt, resource, scheduling, precedence, order, machine, activity, release-date, inventory		alwaysIn, cumulative, cycle		OPL, Cplex			benchmark, real-world		152	712
SialaAH15 [383]	10	make-span, open-shop, task, machine, precedence, order, cmax, tardiness, job, setup-time, earliness, lazy clause generation, job-shop, resource, scheduling	RCPSP, JSSP	disjunctive, cumulative		Mistral			github, benchmark	edge-finding	118	678
SimoninAHL12 [384]	15	resource, activity, precedence, preempt, scheduling, order, task		disjunctive, span constraint, cumulative, cycle		CHIP	satellite			sweep	153	713
Simonis95 [386]	4	transportation, resource, scheduling, task, machine, producer/consumer, precedence, order		cumulative, cycle, diffn, circuit	Prolog	CHIP	aircraft	food industry			276	836
SimonisC95 [388]	14	manpower, flow-shop, task, order, transportation, machine, inventory, job, batch process, producer/consumer, stock level, resource, continuous-process, job-shop, due-date, scheduling		diffn, cumulative	Prolog	OZ, CHIP	aircraft, pipeline	food industry	real-life		277	837
SquillaciPR23 [390]	17	resource, activity, multi-agent, distributed, order, scheduling, task	OSP, Earth Observation Scheduling Problem, EOSP	noOverlap	Python	Cplex	earth orbit, earth observation, satellite		github, benchmark		11	571
SunLYL10 [393]	6	task, order, scheduling, distributed		cycle		Cplex, OPL	automotive				175	735
SvancaraB22 [395]	8	multi-agent, batch process, make-span, order, activity, scheduling, resource, task		alternative constraint, noOverlap			railway		benchmark, real-world	time-tabling	25	585
SzerediS16 [396]	10	task, order, machine, preempt, activity, make-span, resource, precedence, lazy clause generation, scheduling	RCPSP, psplib	cumulative		Cplex, MiniZinc, Chuffed, Gecode			benchmark		101	661
TangB20 [397]	16	batch process, machine, job, flow-shop, precedence, resource, make-span, scheduling, tardiness, due-date, order	2BPHFSP, single machine	span constraint, bin-packing, alwaysIn, endBeforeStart, cycle	Java	Cplex, CPO	semiconductor	manufacturing industry	real-world		47	607

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
TardivoDFMP23 [399]	18	activity, order, preempt, scheduling, make-span, lazy clause generation, task, resource, precedence	RCPSP, psplib, CuSP	disjunctive, cumulative	C++	CHIP, Gecode, MiniZinc			bitbucket, github, benchmark, real-world	energetic reasoning, not-last, not-first, edge-finding, time-tabling, sweep	12	572
TasselGS23 [400]	9	scheduling, preempt, flow-time, flow-shop, task, order, completion-time, machine, make-span, re-scheduling, job, precedence, tardiness, resource, job-shop	JSSP	cumulative, noOverlap, disjunctive	Java	Choco Solver			industrial instance, real-world, supplementary material, github, benchmark		13	573
Teppan22 [403]	8	job-shop, task, make-span, order, cmax, preempt, distributed, resource, completion-time, scheduling, machine, setup-time, job, flow-shop	parallel machine, PTC, FJS, JSSP	noOverlap, endBeforeStart	Java	OR-Tools, OPL			real-life, benchmark		26	586
Tesch16 [404]	27	scheduling, order, job, completion-time, precedence, resource, make-span	CuSP, psplib, RCPSP	cumulative, disjunctive	C++	OPL			Roadef	sweep, edge-finding, energetic reasoning, not-last, time-tabling, not-first	102	662
Tesch18 [405]	17	scheduling, preempt, due-date, order, machine, task, job, completion-time, precedence, lateness, release-date, resource, make-span	CuSP, psplib, single machine, RCPSP	cumulative					Roadef	sweep, edge-finding, energetic reasoning, not-last, time-tabling	77	637
ThiruvadyBME09 [406]	15	tardiness, open-shop, machine, due-date, job, make-span, scheduling, order, resource, setup-time	single machine	cumulative	C++	Gecode					184	744
Tom19 [408]	6	job-shop, job, re-scheduling, task, tardiness, activity, resource, make-span, scheduling, machine, transportation	single machine		Java	OZ, OPL			real-world		63	623
TouatBT22 [410]	8	tardiness, job, activity, preempt, release-date, no preempt, earliness, distributed, due-date, job-shop, flow-shop, resource, scheduling, make-span, completion-time, task, machine, precedence, order	RCPSP, single machine	noOverlap		OZ, OPL, Cplex	robot, container terminal, satellite		benchmark, generated instance	time-tabling	27	587
Touraivane95 [411]	3	scheduling, order, task			Prolog		crew-scheduling		real-life		278	838

Table 3: Automatically Extracted PAPER Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
ValleMGT03 [414]	8	machine, order, transportation, make-span, resource, job, precedence, task, job-shop, scheduling				Ilog Solver	robot		real-life	edge-finder	243	803
VanczaM01 [419]	15	resource, scheduling, precedence, task, machine, order		disjunctive, cycle		OZ	robot		real-life, real-world		256	816
VerfaillieL01 [420]	15	job, open-shop, order, scheduling, task, job-shop	Open Shop Scheduling Problem	cycle		Cplex, OPL	earth observation, satellite				257	817
Vilim02 [421]	1	scheduling, precedence, sequence dependent setup, batch process, activity, setup-time, resource		cumulative, disjunctive						edge-finding	254	814
Vilim03 [422]	1	scheduling, job, open-shop, order, job-shop		cumulative, disjunctive						not-last, edge-finding	244	804
Vilim04 [423]	13	scheduling, precedence, sequence dependent setup, batch process, machine, task, job, completion-time, activity, order, setup-time, resource, job-shop		cumulative, disjunctive					benchmark	sweep, not-last, edge-finding	236	796
Vilim05 [424]	14	scheduling, precedence, preempt, machine, task, job, open-shop, completion-time, activity, order, resource, make-span, job-shop		cumulative, disjunctive	C++				benchmark	not-last	226	786
Vilim09 [425]	15	scheduling, precedence, preempt, job, completion-time, activity, order, resource, job-shop		cumulative, cycle		CPO				energetic reasoning, not-last, edge-finding, not-first	185	745
Vilim09a [426]	15	order, scheduling, resource, completion-time, task, activity, preempt		cycle, cumulative		Ilog Scheduler				edge-finding, not-last, energetic reasoning	186	746
Vilim11 [427]	16	scheduling, precedence, preempt, machine, task, completion-time, activity, order, manpower, resource	psplib, RCPSP	cumulative, disjunctive, cycle					benchmark	sweep, energetic reasoning, not-last, time-tabling, edge-finding	165	725
VilimBC04 [428]	15	distributed, job-shop, resource, scheduling, make-span, open-shop, completion-time, machine, precedence, order, job, activity		disjunctive, cumulative					benchmark, real-life	not-first, edge-finding, not-last	237	797
VilimLS15 [430]	17	machine, precedence, order, cmax, job, activity, earliness, job-shop, resource, scheduling, make-span, completion-time, task	psplib, RCPSP	noOverlap, disjunctive, cumulative		Cplex, CPO, OZ	rectangle-packing		benchmark	time-tabling	119	679
WangB20 [436]	8	job, order, machine, task, distributed, resource, scheduling	Fixed Job Scheduling, FJS	alldifferent		OZ, Gurobi	aircraft		github		48	608

Table 3: Automatically Extracted PAPER Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
WangB23 [437]	8	job, lazy clause generation, order, task, transportation, resource, scheduling	Fixed Job Scheduling, FJS	alldifferent		Gurobi	crew-scheduling, aircraft		real-world, random instance		14	574
WatsonB08 [439]	15	job-shop, resource, scheduling, make-span, completion-time, machine, order, cmax, job		disjunctive	C++	Ilog Scheduler			benchmark, real-world		195	755
WessenCS20 [440]	10	make-span, completion-time, precedence, job, scheduling, task, order, job-shop, multi-agent		circuit		Gecode, OZ	robot		real-world		49	609
WinterMMW22 [442]	18	tardiness, precedence, release-date, setup-time, job, scheduling, completion-time, resource, order, task, machine, distributed, due-date	parallel machine, PMSP	alternative constraint, noOverlap		CPO, Gurobi, Cplex	farming	manufacturing industry, agricultural industry	supplementary material, real-life, industry partner, zenodo, industrial partner, benchmark		28	588
Wolf03 [443]	15	completion-time, resource, job, make-span, machine, activity, job-shop, task, order, preempt, scheduling		cumulative, disjunctive	Java		pipeline		benchmark	not-last, not-first, edge-finding, sweep	245	805
WolfS05 [444]	14	preempt, activity, order, task, completion-time, scheduling, distributed, resource		cumulative		CHIP			real-world	energetic reasoning, not-last, sweep	227	787
WolinskiKG04 [445]	8	resource, precedence, scheduling, machine, order, distributed	SCC	cycle	Java		pipeline				239	799
WuBB05 [446]	1	scheduling, resource, job, make-span, release-date				Ilog Scheduler			benchmark		228	788
YangSS19 [447]	10	resource, completion-time, machine, task, activity, preempt, order, scheduling, lazy clause generation		cumulative, disjunctive	Prolog	Choco Solver, Gecode, CHIP, SICStus, OPL, OR-Tools	rectangle-packing		generated instance	not-last, energetic reasoning, edge-finding	64	624
YoungFS17 [449]	10	lazy clause generation, resource, scheduling, make-span, task, machine, precedence, order, activity, preempt	RCPSP, psplib	disjunctive, cumulative		Chuffed, MiniZinc			benchmark, github, instance generator	time-tabling	88	648
YuraszeckMC23 [451]	6	cmax, job, open-shop, distributed, order, preempt, scheduling, due-date, job-shop, flow-time, make-span, machine, release-date, precedence	OSSP, JSSP	noOverlap					github, benchmark		15	575
ZhangJZL22 [457]	6	setup-time, due-date, scheduling, flow-shop, task, order, completion-time, transportation, machine, make-span, job, precedence, tardiness, resource	parallel machine, single machine	alternative constraint, cumulative, noOverlap, endBeforeStart		OZ	semiconductor		benchmark		29	589
ZhangLS12 [460]	4	scheduling, order, cmax								time-tabling	154	714

Table 3: Automatically Extracted PAPER Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
Zhou96 [461]	15	release-date, job-shop, due-date, task, order, scheduling, precedence, completion-time, job, machine		disjunctive	Prolog	Z3				edge-finding	273	833
ZhouGL15 [463]	5	scheduling, distributed, resource, completion-time, tardiness, machine, setup-time, job, job-shop, flow-shop, task, re-scheduling, make-span, transportation, order, cmax	FJS, HFF, parallel machine	cumulative		CHIP, OR-Tools, Gecode, OZ	railway		real-world		120	680
ZhuS02 [464]	5	activity, scheduling, distributed, resource									255	815
ZibranR11 [465]	4	scheduling, order, activity			Java	OPL, Cplex					166	726
ZibranR11a [466]	10	scheduling, distributed, order, activity, resource				Cplex, OPL				time-tabling	167	727

2.3 Manually Defined Fields

Table 4: Manually Defined PAPER Properties

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
AalianPG23 AalianPG23 [1]	Optimization of Short-Term Underground Mine Planning Using Constraint Programming	CP Opt	real-world	1	n		n			?	1	284
Bit-Monnot23 Bit-Monnot23 [63]	Enhancing Hybrid CP-SAT Search for Disjunctive Scheduling	ARIES CP Opt OR-Tools Mistral	real-world, github, benchmark	1	y		y	-	JSSP OSSP	-	2	320
EfthymiouY23 EfthymiouY23 [126]	Predicting the Optimal Period for Cyclic Hoist Scheduling Problems	OR-Tools	benchmark, random instance, generated instance, real-life, industrial instance	3	n		n	-	CHSP	-	3	360
JuvinHHL23 JuvinHHL23 [217]	An Efficient Constraint Programming Approach to Preemptive Job Shop Scheduling	CP Opt Mistral	supplementary material, github, benchmark	6	ref		y		PJSSP	endBeforeStart span noOverlap	4	419
JuvinHL23 JuvinHL23 [218]	Constraint Programming for the Robust Two-Machine Flow-Shop Scheduling Problem with Budgeted Uncertainty	CP Opt Cplex	real-world	0	ref		n	-	Perm FSSP	endBeforeStart noOverlap sameSequence	5	420
KameugneFND23 KameugneFND23 [222]	Horizontally Elastic Edge Finder Rule for Cumulative Constraint Based on Slack and Density	?	benchmark	5	BL PSPlib		n	-	RCPSPs	cumulative	6	423
KimCMLLP23 KimCMLLP23 [231]	Iterated Greedy Constraint Programming for Scheduling Steelmaking Continuous Casting	Gurobi OR-Tools	real-world, benchmark, zenodo	0	y		n	-	SCC	alternative noOverlap	7	428
Mehdizadeh-Somarin23 Mehdizadeh-Somarin23 [295]	A Constraint Programming Model for a Reconfigurable Job Shop Scheduling Problem with Machine Availability	CP Opt	random instance	0	n		n	-	JSSP RMS	alternative endBeforeStart noOverlap	8	467
PerezGSL23 PerezGSL23 [339]	A Constraint Programming Model for Scheduling the Unloading of Trains in Ports	custom	real-world, generated instance	0	n		n	-	SUTP	table disjunctive	9	490
PovedaAA23 PovedaAA23 [349]	Partially Preemptive Multi Skill/Mode Resource-Constrained Project Scheduling with Generalized Precedence Relations and Calendars	CP Opt MiniZinc Chuffed	real-world, github, benchmark, industrial instance, real-life	4	y		y		PP-MS-MMRCPSP/max-cal		10	494
SquillaciPR23 SquillaciPR23 [390]	Scheduling Complex Observation Requests for a Constellation of Satellites: Large Neighborhood Search Approaches	Cplex Studio	github, benchmark	2	y		n	-	EOSP	?	11	516
TardivoDFMP23 TardivoDFMP23 [399]	Constraint Propagation on GPU: A Case Study for the Cumulative Constraint	MiniCPP MiniZinc	bitbucket, github, benchmark, real-world	9	PSPLib BL Pack		y	-	RCPSP	cumulative	12	521
TasselGS23 TasselGS23 [400]	An End-to-End Reinforcement Learning Approach for Job-Shop Scheduling Problems Based on Constraint Programming	custom Choco	industrial instance, real-world, supplementary material, github, benchmark	0	ref		y	-	JSSP	noOverlap	13	522
WangB23 WangB23 [437]	Dynamic All-Different and Maximal Cliques Constraints for Fixed Job Scheduling	FaCiLe	real-world, random instance	0	(y)		n	[436]	FJS	-	14	543
YuraszeckMC23 YuraszeckMC23 [451]	A competitive constraint programming approach for the group shop scheduling problem	CP Opt	github, benchmark	0	ref		n	-	GSSP	noOverlap endBeforeStart	15	553

Table 4: Manually Defined PAPER Properties

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
ArmstrongGOS22 ArmstrongGOS22 [15]	A Two-Phase Hybrid Approach for the Hybrid Flexible Flowshop with Transportation Times	CP Opt	real-world, benchmark	0	(y)		-	[14]	$HFFm|tt|C_{\max}$	endBeforeStart alternative cumulative noOverlap	16	293
BoudreaultSLQ22 BoudreaultSLQ22 [80]	A Constraint Programming Approach to Ship Refit Project Scheduling	MiniZinc Chuffed	benchmark, generated instance, supplementary material, gitlab, real-life, industrial partner, github, real-world	9			y	-	RCPSP	cumulative	17	332
GeitzGSSW22 GeitzGSSW22 [161]	Solving the Extended Job Shop Scheduling Problem with AGVs - Classical and Quantum Approaches	firstCS QUBO	real-life, github, real-world	8	y		n	-	JSSP		18	381
JungblutK22 JungblutK22 [216]	Optimal Schedules for High-Level Programming Environments on FPGAs with Constraint Programming	MiniZinc	benchmark, github, real-world	0	y		y	-			19	418
LiFJZLL22 LiFJZLL22 [262]	Constraint Programming for a Novel Integrated Optimization of Blocking Job Shop Scheduling and Variable-Speed Transfer Robot Assignment	OPL CP Opt	benchmark	0	ref		n	-	BJSSP	endBEforeStart alternative noOverlap	20	448
LuoB22 LuoB22 [285]	Packing by Scheduling: Using Constraint Programming to Solve a Complex 2D Cutting Stock Problem	CPO	generated instance, github, real-life, real-world, industry partner, industrial instance	2	n		n	-	2SCSP-FF	pulse alwaysIn forbidExtent stateFunction	21	461
OuelletQ22 OuelletQ22 [331]	A MinCumulative Resource Constraint	Choco	github, benchmark, random instance	1	y		y	-		cumulative minCumulative	22	486
OujanaAYB22 OujanaAYB22 [332]	Solving a realistic hybrid and flexible flow shop scheduling problem through constraint programming: industrial case in a packaging company	CP Opt	benchmark, industrial instance, real-world, real-life	0	n		n	-	HFFS	alternative span noOverlap endBeforeStart	23	487
PopovicCGNC22 PopovicCGNC22 [347]	Scheduling the Equipment Maintenance of an Electric Power Transmission Network Using Constraint Programming	CP Opt		0	n		n	-	TMS	alwaysIn noOverlap	24	493
SvancaraB22 SvancaraB22 [395]	Tackling Train Routing via Multi-agent Pathfinding and Constraint-based Scheduling		benchmark, real-world	0							25	518
Teppan22 Teppan22 [403]	Types of Flexible Job Shop Scheduling: A Constraint Programming Experiment	OPL	real-life, benchmark	0	ref		n	-	FJSSP	noOverlap alternative endBeforeStart	26	523
TouatBT22 TouatBT22 [410]	A Constraint Programming Model for the Scheduling Problem with Flexible Maintenance under Human Resource Constraints	OPL	benchmark, generated instance	0	n		n	-	Single Machine Scheduling	alternative noOverlap forbidExtent	27	528
WinterMMW22 WinterMMW22 [442]	Modeling and Solving Parallel Machine Scheduling with Contamination Constraints in the Agricultural Industry	Cplex Gurobi CP Opt Sim Anneal	supplementary material, real-life, industry partner, zenodo, industrial partner, benchmark	0	y		y	-	PMSP	alternative noOverlap	28	546
ZhangJZL22 ZhangJZL22 [457]	Constraint Programming for Modeling and Solving a Hybrid Flow Shop Scheduling Problem	OP Opt	benchmark	0	ref		n	-	HFSP	alternative endBeforeStart noOverlap cumulative	29	554

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
AntuoriHHEN21 AntuoriHHEN21 [12]	Combining Monte Carlo Tree Search and Depth First Search Methods for a Car Manufacturing Workshop Scheduling Problem	MCTS	gitlab, supplementary material	1	y		y				30	290
ArmstrongGOS21 ArmstrongGOS21 [14]	The Hybrid Flexible Flowshop with Transportation Times	MiniZinc Chuffed CP Opt SICStus	instance generator, industry partner, zenodo, supplementary material, real-world, industrial partner, benchmark	1	y		y	-	$HFFm\|tt\|C_{\max}$	cumulative diffn table	31	292
Astrand0F21 Astrand0F21 [21]	Short-Term Scheduling of Production Fleets in Underground Mines Using CP-Based LNS	Gecode	benchmark, real-world, real-life, generated instance	0	ref generated		n	-		-	32	297
BenderWS21 BenderWS21 [54]	Applying Constraint Programming to the Multi-mode Scheduling Problem in Harvest Logistics	CP Opt		9	y		n	-	MRCPSP	noOverlap alternative	33	314
GeibingerKKMMW21 GeibingerKKMMW21 [157	Physician Scheduling During a Pandemic	MiniZinc	real-world	3	y		n	-		nvalue	34	378
GeibingerMM21 GeibingerMM21 [160]	Constraint Logic Programming for Real-World Test Laboratory Scheduling	clingcon	real-life, github, generated instance, real-world, benchmark	0	y				TLSP RCPSP	disjunctive	35	380
HanenKP21 HanenKP21 [186]	Two Deadline Reduction Algorithms for Scheduling Dependent Tasks on Parallel Processors	Python	Roadef, generated instance, random instance	1	ref		n	-	$P\|prec, r_i, d_i\|*$	-	36	398
HillTV21 HillTV21 [202]	A Computational Study of Constraint Programming Approaches for Resource-Constrained Project Scheduling with Autonomous Learning Effects	CP Opt	real-world	0	PSPlib		n	-	RCPSP	cumulative alternative endBeforeStart	37	408
KlankeBYE21 KlankeBYE21 [232]	Combining Constraint Programming and Temporal Decomposition Approaches - Scheduling of an Industrial Formulation Plant	OR-Tools	benchmark, random instance, real-life	0	n		n	-		cumulative circuit noOverlap	38	429
KovacsTKSG21 KovacsTKSG21 [244]	Utilizing Constraint Optimization for Industrial Machine Workload Balancing	Gurobi OR-Tools Cplex CP Opt	github, supplementary material, real-world, benchmark	2	y		y	-	extended RCPSP	cumulative	39	434
LacknerMMWW21 LacknerMMWW21 [253]	Minimizing Cumulative Batch Processing Time for an Industrial Oven Scheduling Problem	CP Opt Chuffed OR-Tools Gurobi OPL	random instance, industrial partner, benchmark, instance generator, real-life, supplementary material	3	y		y		OSP		40	443
BarzegaranZP20 BarzegaranZP20 [41]	Quality-Of-Control-Aware Scheduling of Communication in TSN-Based Fog Computing Platforms Using Constraint Programming	OR-Tools		5	n		n	-	FCP		41	308
GodetLHS20 GodetLHS20 [168]	Using Approximation within Constraint Programming to Solve the Parallel Machine Scheduling Problem with Additional Unit Resources	MiniZinc Choco Chuffed	github, real-life, benchmark, generated instance	0	JSON		y	-	PMSPAUR	disjunctive cumulative alldifferent enqueueCstr approxCstr	42	387

Table 4: Manually Defined PAPER Properties

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
GroleazNS20 GroleazNS20 [179]	Solving the Group Cumulative Scheduling Problem with CPO and ACO	CP Opt ACO	benchmark, industrial instance	0	-		-	[179]	GCSP	groupCumulative	43	394
GroleazNS20a GroleazNS20a [178]	ACO with automatic parameter selection for a scheduling problem with a group cumulative constraint	CPO ACO	industrial partner, benchmark	0	y		n	-	GCSP	groupCumulative	44	395
Mercier-AubinGQ20 Mercier-AubinGQ20 [299]	Leveraging Constraint Scheduling: A Case Study to the Textile Industry	MiniZinc Chuffed	industrial instance, industrial partner	1	a		a	-		circuit cumulative	45	469
NattafM20 NattafM20 [316]	Filtering Rules for Flow Time Minimization in a Parallel Machine Scheduling Problem	Cplex CP Opt	benchmark, industrial instance	7	-		-	[289]	PTC	alternative noOverlap	46	479
TangB20 TangB20 [397]	CP and Hybrid Models for Two-Stage Batching and Scheduling	Cplex CP Opt	real-world	0	n		n	-	2BPHFSP	span alwaysIn	47	520
WangB20 WangB20 [436]	Global Propagation of Transition Cost for Fixed Job Scheduling	FaCiLe	github	0	y		n	-	FJS	-	48	542
WessenCS20 WessenCS20 [440]	Scheduling of Dual-Arm Multi-tool Assembly Robots and Workspace Layout Optimization	Gecode	real-world	10	n		n	-		circuit alldifferent	49	545
BadicaBIL19 BadicaBIL19 [25]	Exploring the Space of Block Structured Scheduling Processes Using Constraint Logic Programming	ECLiPSe	github	0	dead		dead	-			50	299
BehrensLM19 BehrensLM19 [46]	A Constraint Programming Approach to Simultaneous Task Allocation and Motion Scheduling for Industrial Dual-Arm Manipulation Tasks	OR-Tools	real-world, github	0	y		y	-	STAAMS		51	310
BogaerdtW19 BogaerdtW19 [416]	Lower Bounds for Uniform Machine Scheduling Using Decision Diagrams	custom Cplex CPO	benchmark	4	n		n	-	Multi Machine Scheduling	noOverlap	52	324
ColT19 ColT19 [100]	Industrial Size Job Shop Scheduling Tackled by Present Day CP Solvers	CP Opt OR-Tools	github, benchmark, real-world	2	y		y	-	JSSP	noOverlap	53	346
FrimodigS19 FrimodigS19 [145]	Models for Radiation Therapy Patient Scheduling	Mini-Zinc Gecode Cplex	benchmark, real-world	1	n		n	-		cumulative regular bin-packing	54	369
FrohnerTR19 FrohnerTR19 [146]	Casual Employee Scheduling with Constraint Programming and Metaheuristics		benchmark, real-world	0							55	370
GalleguillosKSB19 GalleguillosKSB19 [148]	Constraint Programming-Based Job Dispatching for Modern HPC Applications	OR-Tools		5			y		on-line dispatch		56	372
GeibingerMM19 GeibingerMM19 [159]	Investigating Constraint Programming for Real World Industrial Test Laboratory Scheduling		real-life, generated instance, industrial partner, real-world, benchmark	3							57	379
KucukY19 KucukY19 [249]	A Constraint Programming Approach for Agile Earth Observation Satellite Scheduling Problem		benchmark, generated instance	0							58	439
LiuLH19 LiuLH19 [269]	Solving the Talent Scheduling Problem by Parallel Constraint Programming		CSPlib, benchmark	0							59	455
MalapertN19 MalapertN19 [289]	A New CP-Approach for a Parallel Machine Scheduling Problem with Time Constraints on Machine Qualifications		generated instance, benchmark, industrial instance, Roadef	3							60	465
MurinR19 MurinR19 [310]	Scheduling of Mobile Robots Using Constraint Programming	CP Opt Cplex OPL	real-life, benchmark, github	3	y		y	-	JSPT	endBeforeStart alternative noOverlap	61	476

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
ParkUJR19 ParkUJR19 [337]	Developing a Production Scheduling System for Modular Factory Using Constraint Programming		real-world	0							62	488
Tom19 Tom19 [408]	Fuzzy Multi-Constraint Programming Model for Weekly Meals Scheduling		real-world	0							63	527
YangSS19 YangSS19 [447]	Time Table Edge Finding with Energy Variables		generated instance	1							64	551
ArbaouiY18 ArbaouiY18 [13]	Solving the Unrelated Parallel Machine Scheduling Problem with Additional Resources Using Constraint Programming		benchmark	0							65	291
AstrandJZ18 AstrandJZ18 [22]	Fleet Scheduling in Underground Mines Using Constraint Programming			0							66	298
BenediktSMVH18 BenediktSMVH18 [56]	Energy-Aware Production Scheduling with Power-Saving Modes	CPO Gurobi	github, random instance, generated instance	1	y		y	-	Energy Aware Production Scheduling		67	315
DemirovicS18 DemirovicS18 [115]	Constraint Programming for High School Timetabling: A Scheduling-Based Model with Hot Starts		real-world, benchmark	5							68	353
He0GLW18 He0GLW18 [188]	A Fast and Scalable Algorithm for Scheduling Large Numbers of Devices Under Real-Time Pricing	Gurobi Python	real-world, bitbucket	8	y		y	-	FSDN-DS DSP-MH-RTP		69	399
HoYCLLCLC18 HoYCLLCLC18 [203]	A Platform for Dynamic Optimal Nurse Scheduling Based on Integer Linear Programming along with Multiple Criteria Constraints		real-world	0							70	409
KameugneFGOQ18 KameugneF-GOQ18 [221]	Horizontally Elastic Not-First/Not-Last Filtering Algorithm for Cumulative Resource Constraint		benchmark, real-world	0							71	422
Laborie18a Laborie18a [251]	An Update on the Comparison of MIP, CP and Hybrid Approaches for Mixed Resource Allocation and Scheduling		real-life, benchmark, real-world	0							72	442
NishikawaSTT18 NishikawaSTT18 [318]	Scheduling of Malleable Fork-Join Tasks with Constraint Programming		real-world, benchmark	0							73	480
NishikawaSTT18a NishikawaSTT18a [319]	Scheduling of Malleable Tasks Based on Constraint Programming		real-world, benchmark, real-life	0							74	481
OuelletQ18 OuelletQ18 [330]	A O(n \log ^2 n) Checker and O(n^2 \log n) Filtering Algorithm for the Energetic Reasoning		benchmark, Roadef	0							75	485
RiahiNS018 RiahiNS018 [359]	Local Search for Flowshops with Setup Times and Blocking Constraints		real-world, real-life, benchmark	0							76	501
Tesch18 Tesch18 [405]	Improving Energetic Propagations for Cumulative Scheduling		Roadef	0							77	525
BofillCSV17 BofillCSV17 [66]	An Efficient SMT Approach to Solve MRCPSP/max Instances with Tight Constraints on Resources		benchmark	2							78	321
CappartS17 CappartS17 [89]	Rescheduling Railway Traffic on Real Time Situations Using Time-Interval Variables	CPO	bitbucket, random instance, real-life	1	y		n	-	Rescheduling Railway Traffic		79	336
GelainPRVW17 GelainPRVW17 [162]	A Local Search Approach for Incomplete Soft Constraint Problems: Experimental Results on Meeting Scheduling Problems		CSPlib, real-life, benchmark	2							80	382
GoldwaserS17 GoldwaserS17 [171]	Optimal Torpedo Scheduling	Chuffed Gurobi	instance generator, github, generated instance	4	y		n	-	Torpedo Scheduling		81	388
Hooker17 Hooker17 [208]	Job Sequencing Bounds from Decision Diagrams		benchmark, random instance	0							82	413

Table 4: Manually Defined PAPER Properties

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
KletzanderM17 KletzanderM17 [233]	A Multi-stage Simulated Annealing Algorithm for the Torpedo Scheduling Problem			2							83	430
LiuCGM17 LiuCGM17 [270]	NightSplitter: A Scheduling Tool to Optimize (Sub)group Activities	Chuffed OR-Tools HCSP SA	github	11	n			-	NightSplit		84	453
Madi-WambaLOBM17 Madi-WambaLOBM17 [287]	Green Energy Aware Scheduling Problem in Virtualized Datacenters		real-world	0							85	463
MossigeGSMC17 MossigeGSMC17 [306]	Time-Aware Test Case Execution Scheduling for Cyber-Physical Systems		industrial partner, real-world, benchmark, random instance, CSPlib, generated instance	4							86	473
Pralet17 Pralet17 [350]	An Incomplete Constraint-Based System for Scheduling with Renewable Resources		benchmark	1							87	495
YoungFS17 YoungFS17 [449]	Constraint Programming Applied to the Multi-Skill Project Scheduling Problem		benchmark, github, instance generator	6							88	552
BonfiettiZLM16 BonfiettiZLM16 [76]	The Multirate Resource Constraint		generated instance, github, industrial instance, benchmark, real-world	1							89	330
BoothNB16 BoothNB16 [77]	A Constraint Programming Approach to Multi-Robot Task Allocation and Scheduling in Retirement Homes		real-world	0							90	331
BridiLBBM16 BridiLBBM16 [84]	DARDIS: Distributed And Randomized DIspatching and Scheduling			0							91	333
CauwelaertDMS16 CauwelaertDMS16 [92]	Efficient Filtering for the Unary Resource with Family-Based Transition Times		real-life, bitbucket, benchmark	2							92	339
FontaineMH16 FontaineMH16 [141]	Parallel Composition of Scheduling Solvers		benchmark	2							93	366
GilesH16 GilesH16 [164]	Solving a Supply-Delivery Scheduling Problem with Constraint Programming			0							94	384
GingrasQ16 GingrasQ16 [165]	Generalizing the Edge-Finder Rule for the Cumulative Constraint		benchmark	0							95	385
HechingH16 HechingH16 [190]	Scheduling Home Hospice Care with Logic-Based Benders Decomposition		real-world	0							96	401
JelinekB16 JelinekB16 [214]	Using Constraint Logic Programming to Schedule Solar Array Operations on the International Space Station		real-life	2							97	417
LimHTB16 LimHTB16 [265]	Online HVAC-Aware Occupancy Scheduling with Adaptive Temperature Control		real-world	4							98	450
Madi-WambaB16 Madi-WambaB16 [286]	The TaskIntersection Constraint		real-world, benchmark, random instance, generated instance	3							99	462
SchuttS16 SchuttS16 [376]	Explaining Producer/Consumer Constraints		benchmark	1							100	509
SzerediS16 SzerediS16 [396]	Modelling and Solving Multi-mode Resource-Constrained Project Scheduling		benchmark	2							101	519

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
Tesch16 Tesch16 [404]	A Nearly Exact Propagation Algorithm for Energetic Reasoning in \mathcal O(n^2 \log n)		Roadef	1							102	524
BartakV15 BartakV15 [39]	Reactive Recovery from Machine Breakdown in Production Scheduling with Temporal Distance and Resource Constraints		real-world, real-life	0							103	306
BofillGSV15 BofillGSV15 [68]	MaxSAT-Based Scheduling of B2B Meetings		industrial instance	3							104	323
BurtLPS15 BurtLPS15 [86]	Scheduling with Fixed Maintenance, Shared Resources and Nonlinear Feedrate Constraints: A Mine Planning Case Study		real-world, benchmark, industry partner	5							105	335
DejemeppeCS15 DejemeppeCS15 [112]	The Unary Resource with Transition Times		real-world, bitbucket, generated instance, benchmark	4							106	351
EvenSH15 EvenSH15 [131]	A Constraint Programming Approach for Non-preemptive Evacuation Scheduling		real-life, real-world	0							107	364
GayHLS15 GayHLS15 [152]	Conflict Ordering Search for Scheduling Problems		benchmark, bitbucket	0							108	374
GayHS15 GayHS15 [153]	Simple and Scalable Time-Table Filtering for the Cumulative Constraint		bitbucket	2							109	375
GayHS15a GayHS15a [154]	Time-Table Disjunctive Reasoning for the Cumulative Constraint		benchmark, bitbucket, real-world	0							110	376
KreterSS15 KreterSS15 [245]	Modeling and Solving Project Scheduling with Calendars		benchmark	3							111	437
LimBTBB15 LimBTBB15 [266]	Large Neighborhood Search for Energy Aware Meeting Scheduling in Smart Buildings		benchmark	3							112	449
LombardiBM15 LombardiBM15 [272]	Deterministic Estimation of the Expected Makespan of a POS Under Duration Uncertainty		benchmark, real-world	0							113	456
MelgarejoLS15 MelgarejoLS15 [6]	A Time-Dependent No-Overlap Constraint: Application to Urban Delivery Problems		real-world, benchmark	1							114	468
MurphyMB15 MurphyMB15 [311]	Design and Evaluation of a Constraint-Based Energy Saving and Scheduling Recommender System		real-world	3							115	477
PesantRR15 PesantRR15 [341]	A Comparative Study of MIP and CP Formulations for the B2B Scheduling Optimization Problem			1							116	491
PraletLJ15 PraletLJ15 [351]	Scheduling Running Modes of Satellite Instruments Using Constraint-Based Local Search			0							117	496
SialaAH15 SialaAH15 [383]	Two Clause Learning Approaches for Disjunctive Scheduling		github, benchmark	5							118	512
VilimLS15 VilimLS15 [430]	Failure-Directed Search for Constraint-Based Scheduling		benchmark	8							119	541
ZhouGL15 ZhouGL15 [463]	On complex hybrid flexible flowshop scheduling problems based on constraint programming		real-world	0							120	557
AlesioNBG14 AlesioNBG14 [119]	Worst-Case Scheduling of Software Tasks - A Constraint Optimization Model to Support Performance Testing		benchmark	2							121	288
BartoliniBBLM14 BartoliniBBLM14 [40]	Proactive Workload Dispatching on the EURORA Supercomputer			4							122	307
BessiereHMQW14 BessiereHMQW14 [61]	Buffered Resource Constraint: Algorithms and Complexity		benchmark, real-life	0							123	318
BofillEGPSV14 BofillEGPSV14 [67]	Scheduling B2B Meetings		industrial instance	6							124	322

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BonfiettiLM14 BonfiettiLM14 [74]	Disregarding Duration Uncertainty in Partial Order Schedules? Yes, We Can!		real-world, benchmark	2							125	328
DejemeppeD14 DejemeppeD14 [113]	Continuously Degrading Resource and Interval Dependent Activity Durations in Nuclear Medicine Patient Scheduling		bitbucket	0							126	352
DerrienP14 DerrienP14 [117]	A New Characterization of Relevant Intervals for Energetic Reasoning		random instance	0							127	354
DerrienPZ14 DerrienPZ14 [118]	A Declarative Paradigm for Robust Cumulative Scheduling		benchmark, random instance, real-world	0							128	355
DoulabiRP14 DoulabiRP14 [123]	A Constraint Programming-Based Column Generation Approach for Operating Room Planning and Scheduling			0							129	358
FriedrichFMRSST14 FriedrichFMRSST14 [144]	Representing Production Scheduling with Constraint Answer Set Programming			0							130	No
GaySS14 GaySS14 [155]	Continuous Casting Scheduling with Constraint Programming		real-life, CSPlib	0							131	377
HoundjiSWD14 HoundjiSWD14 [210]	The StockingCost Constraint		bitbucket, generated instance	0							132	415
KoschB14 KoschB14 [237]	A New MIP Model for Parallel-Batch Scheduling with Non-identical Job Sizes		benchmark	0							133	432
BonfiettiLM13 BonfiettiLM13 [73]	De-Cycling Cyclic Scheduling Problems			0							134	327
CireCH13 CireCH13 [96]	Mixed Integer Programming vs. Logic-Based Benders Decomposition for Planning and Scheduling	CP Opt Cplex		1	dead		n	-			135	343
GuSS13 GuSS13 [181]	A Lagrangian Relaxation Based Forward-Backward Improvement Heuristic for Maximising the Net Present Value of Resource-Constrained Projects	Chuffed	benchmark	1	dead			-	RCPSPDC	cumulative maxNVPProp	136	397
HeinzKB13 HeinzKB13 [192]	Recent Improvements Using Constraint Integer Programming for Resource Allocation and Scheduling			0							137	403
KelarevaTK13 KelarevaTK13 [226]	CP Methods for Scheduling and Routing with Time-Dependent Task Costs	MiniZinc CPX G12FD	real-world	5	ref		-	-	LSFRP BPCTOP	alldifferent alldifferentExcept0	138	425
LetortCB13 LetortCB13 [260]	A Synchronized Sweep Algorithm for the *k-dimensional cumulative* Constraint	SICStus Choco	Roadef, benchmark, random instance	2	PSPlib		-	-	RCPSP	cumulative kDimensionalCum	139	447
LombardiM13 LombardiM13 [279]	A Min-Flow Algorithm for Minimal Critical Set Detection in Resource Constrained Project Scheduling			0							140	460
OuelletQ13 OuelletQ13 [329]	Time-Table Extended-Edge-Finding for the Cumulative Constraint		benchmark	1							141	484
SchuttFS13 SchuttFS13 [373]	Scheduling Optional Tasks with Explanation		benchmark	1							142	506
SchuttFS13a SchuttFS13a [372]	Explaining Time-Table-Edge-Finding Propagation for the Cumulative Resource Constraint	Mercury G12	benchmark	5	PSPlib AT BL Pack KSD15D PackD		-	-	RCPSP	cumulative	143	507
BillautHL12 BillautHL12 [62]	Complete Characterization of Near-Optimal Sequences for the Two-Machine Flow Shop Scheduling Problem		random instance	0							144	319

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BonfiettiLBM12 BonfiettiLBM12 [71]	Global Cyclic Cumulative Constraint		benchmark	3							145	326
BonfiettiM12 BonfiettiM12 [75]	A Constraint-based Approach to Cyclic Resource-Constrained Scheduling Problem		industrial instance	0							146	329
HeinzB12 HeinzB12 [191]	Reconsidering Mixed Integer Programming and MIP-Based Hybrids for Scheduling			0							147	402
IfrimOS12 IfrimOS12 [212]	Properties of Energy-Price Forecasts for Scheduling		real-life	1							148	416
LetortBC12 LetortBC12 [259]	A Scalable Sweep Algorithm for the cumulative Constraint		Roadef, benchmark, random instance	2							149	446
RendlPHPR12 RendlPHPR12 [358]	Hybrid Heuristics for Multimodal Homecare Scheduling		real-world, CSPlib, benchmark	2							150	500
SchuttCSW12 SchuttCSW12 [371]	Maximising the Net Present Value for Resource-Constrained Project Scheduling		benchmark	1							151	505
SerraNM12 SerraNM12 [378]	The Offshore Resources Scheduling Problem: Detailing a Constraint Programming Approach		benchmark, real-world	4							152	511
SimoninAHL12 SimoninAHL12 [384]	Scheduling Scientific Experiments on the Rosetta/Philae Mission	MOST Ilog Scheduler		0	n		n	-		cumulative dataTransfer	153	513
ZhangLS12 ZhangLS12 [460]	Model and Solution for Hot Strip Rolling Scheduling Problem Based on Constraint Programming Method			0							154	555
BonfiettiLBM11 BonfiettiLBM11 [70]	A Constraint Based Approach to Cyclic RCPSP		generated instance, industrial instance, benchmark	3							155	325
ChapadosJR11 ChapadosJR11 [94]	Retail Store Workforce Scheduling by Expected Operating Income Maximization			0							156	341
ClercqPBJ11 ClercqPBJ11 [97]	Filtering Algorithms for Discrete Cumulative Problems with Overloads of Resource		benchmark	1							157	344
EdisO11 EdisO11 [125]	Parallel Machine Scheduling with Additional Resources: A Lagrangian-Based Constraint Programming Approach			0							158	359
GrimesH11 GrimesH11 [175]	Models and Strategies for Variants of the Job Shop Scheduling Problem		benchmark	1							159	392
HeinzS11 HeinzS11 [194]	Explanations for the Cumulative Constraint: An Experimental Study		benchmark	1							160	404
HermenierDL11 HermenierDL11 [201]	Bin Repacking Scheduling in Virtualized Datacenters			1							161	407
KameugneFSN11 KameugneFSN11 [223]	A Quadratic Edge-Finding Filtering Algorithm for Cumulative Resource Constraints		benchmark	1							162	424
LahimerLH11 LahimerLH11 [255]	Climbing Depth-Bounded Adjacent Discrepancy Search for Solving Hybrid Flow Shop Scheduling Problems with Multiprocessor Tasks		benchmark	2							163	444
LombardiBMB11 LombardiBMB11 [273]	Precedence Constraint Posting for Cyclic Scheduling Problems		benchmark, industrial instance, real-life	0							164	457
Vilim11 Vilim11 [427]	Timetable Edge Finding Filtering Algorithm for Discrete Cumulative Resources		benchmark	1							165	539
ZibranR11 ZibranR11 [465]	Conflict-Aware Optimal Scheduling of Code Clone Refactoring: A Constraint Programming Approach			0							166	559

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ZibranR11a ZibranR11a [466]	A Constraint Programming Approach to Conflict-Aware Optimal Scheduling of Prioritized Code Clone Refactoring			0							167	560
BertholdHLMS10 BertholdHLMS10 [60]	A Constraint Integer Programming Approach for Resource-Constrained Project Scheduling			1							168	317
CobanH10 CobanH10 [98]	Single-Facility Scheduling over Long Time Horizons by Logic-Based Benders Decomposition			0							169	345
Davenport10 Davenport10 [106]	Integrated Maintenance Scheduling for Semiconductor Manufacturing			0							170	349
GrimesH10 GrimesH10 [174]	Job Shop Scheduling with Setup Times and Maximal Time-Lags: A Simple Constraint Programming Approach		benchmark	1							171	391
LombardiM10 LombardiM10 [276]	Constraint Based Scheduling to Deal with Uncertain Durations and Self-Timed Execution		real-world, benchmark	1							172	459
MakMS10 MakMS10 [288]	A constraint programming approach for production scheduling of multi-period virtual cellular manufacturing systems			0							173	464
SchuttW10 SchuttW10 [377]	A New $O(n^2 \log n)$ Not-First/Not-Last Pruning Algorithm for Cumulative Resource Constraints		benchmark	1							174	510
SunLYL10 SunLYL10 [393]	Scheduling Optimization Techniques for FlexRay Using Constraint-Programming			0							175	517
Acuna-AgostMFG09 Acuna-AgostMFG09 [4]	Constraint Programming and Mixed Integer Linear Programming for Rescheduling Trains under Disrupted Operations		Roadef	1							176	286
AronssonBK09 AronssonBK09 [16]	MILP formulations of cumulative constraints for railway scheduling - A comparative study		real-world, real-life	0							177	294
Baptiste09 Baptiste09 [26]	Constraint-Based Schedulers, Do They Really Work?			0							178	300
GrimesHM09 GrimesHM09 [176]	Closing the Open Shop: Contradicting Conventional Wisdom		benchmark	0							179	393
Laborie09 Laborie09 [250]	IBM ILOG CP Optimizer for Detailed Scheduling Illustrated on Three Problems		real-world, benchmark	2							180	441
LombardiM09 LombardiM09 [274]	A Precedence Constraint Posting Approach for the RCPSP with Time Lags and Variable Durations		real-world, instance generator	1							181	458
MonetteDH09 MonetteDH09 [303]	Just-In-Time Scheduling with Constraint Programming		benchmark	0							182	472
SchuttFSW09 SchuttFSW09 [374]	Why Cumulative Decomposition Is Not as Bad as It Sounds		benchmark, real-world	1							183	508
ThiruvadyBME09 ThiruvadyBME09 [406]	Hybridizing Beam-ACO with Constraint Programming for Single Machine Job Scheduling			0							184	526
Vilim09 Vilim09 [425]	Edge Finding Filtering Algorithm for Discrete Cumulative Resources in $O(kn \log n)${\mathcal O}(kn {\rm log} n)			0							185	537
Vilim09a Vilim09a [426]	Max Energy Filtering Algorithm for Discrete Cumulative Resources			1							186	538
BarlattCG08 BarlattCG08 [32]	A Hybrid Approach for Solving Shift-Selection and Task-Sequencing Problems		real-world	1							187	303
BeldiceanuCP08 BeldiceanuCP08 [51]	New Filtering for the cumulative Constraint in the Context of Non-Overlapping Rectangles		benchmark	0							188	312
DoomsH08 DoomsH08 [122]	Gap Reduction Techniques for Online Stochastic Project Scheduling			0							189	357
HentenryckM08 HentenryckM08 [200]	The Steel Mill Slab Design Problem Revisited		CSPlib	0							190	406

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
LauLN08 LauLN08 [257]	A Combinatorial Auction Framework for Solving Decentralized Scheduling Problems (Extended Abstract)		benchmark, real-world	0							191	445
MouraSCL08 MouraSCL08 [308]	Planning and Scheduling the Operation of a Very Large Oil Pipeline Network			0							192	474
MouraSCL08a MouraSCL08a [307]	Heuristics and Constraint Programming Hybridizations for a Real Pipeline Planning and Scheduling Problem		real-world, benchmark	0							193	475
PoderB08 PoderB08 [343]	Filtering for a Continuous Multi-Resources cumulative Constraint with Resource Consumption and Production			0							194	492
WatsonB08 WatsonB08 [439]	A Hybrid Constraint Programming / Local Search Approach to the Job-Shop Scheduling Problem		benchmark, real-world	1							195	544
AkkerDH07 AkkerDH07 [415]	A Column Generation Based Destructive Lower Bound for Resource Constrained Project Scheduling Problems			0							196	287
BeldiceanuP07 BeldiceanuP07 [52]	A Continuous Multi-resources *cumulative* Constraint with Positive-Negative Resource Consumption-Production			0							197	313
DavenportKRSH07 DavenportKRSH07 [107]	An Application of Constraint Programming to Generating Detailed Operations Schedules for Steel Manufacturing			0							198	350
GarganiR07 GarganiR07 [149]	An Efficient Model and Strategy for the Steel Mill Slab Design Problem		real-life, CSPlib	0							199	373
HoeveGSL07 HoeveGSL07 [418]	Optimal Multi-Agent Scheduling with Constraint Programming		benchmark	0							200	410
KeriK07 KeriK07 [228]	Computing Tight Time Windows for RCPSPWET with the Primal-Dual Method			2							201	426
KrogtLPHJ07 KrogtLPHJ07 [417]	Scheduling for Cellular Manufacturing		real-world	0							202	438
Limtanyakul07 Limtanyakul07 [267]	Scheduling of Tests on Vehicle Prototypes Using Constraint and Integer Programming		real-life	0							203	452
MonetteDD07 MonetteDD07 [302]	A Position-Based Propagator for the Open-Shop Problem		benchmark	0							204	471
RossiTHP07 RossiTHP07 [363]	Replenishment Planning for Stochastic Inventory Systems with Shortage Cost			0							205	503
BeniniBGM06 BeniniBGM06 [57]	Allocation, Scheduling and Voltage Scaling on Energy Aware MPSoCs		real-life	0							206	316
GomesHS06 GomesHS06 [173]	Constraint Programming for Distributed Planning and Scheduling		real-life	0							207	390
KhemmoudjPB06 KhemmoudjPB06 [230]	When Constraint Programming and Local Search Solve the Scheduling Problem of Electricité de France Nuclear Power Plant Outages		real-world	0							208	427
KovacsV06 KovacsV06 [243]	Progressive Solutions: A Simple but Efficient Dominance Rule for Practical RCPSP		industrial partner, benchmark, generated instance	0							209	436
LiuJ06 LiuJ06 [271]	LP-TPOP: Integrating Planning and Scheduling Through Constraint Programming			0							210	454
QuSN06 QuSN06 [356]	Using Constraint Programming to Achieve Optimal Prefetch Scheduling for Dependent Tasks on Run-Time Reconfigurable Devices			0							211	498

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
AbrilSB05 AbrilSB05 [3]	Distributed Constraints for Large-Scale Scheduling Problems			0							212	285
ArtiouchineB05 ArtiouchineB05 [19]	Inter-distance Constraint: An Extension of the All-Different Constraint for Scheduling Equal Length Jobs		generated instance, random instance	0							213	296
CarchraeBF05 CarchraeBF05 [90]	Methods to Learn Abstract Scheduling Models			0							214	337
ChuX05 ChuX05 [95]	A Hybrid Algorithm for a Class of Resource Constrained Scheduling Problems			0							215	342
DilkinaDH05 DilkinaDH05 [120]	Extending Systematic Local Search for Job Shop Scheduling Problems			0							216	356
FortinZDF05 FortinZDF05 [142]	Interval Analysis in Scheduling			0							217	367
FrankK05 FrankK05 [143]	Mixed Discrete and Continuous Algorithms for Scheduling Airborne Astronomy Observations		benchmark	0							218	368
Geske05 Geske05 [163]	Railway Scheduling with Declarative Constraint Programming		real-life	0							219	383
GodardLN05 GodardLN05 [166]	Randomized Large Neighborhood Search for Cumulative Scheduling		benchmark	0							220	386
HebrardTW05 HebrardTW05 [189]	Computing Super-Schedules			0							221	400
Hooker05a Hooker05a [206]	Planning and Scheduling to Minimize Tardiness			0							222	412
KovacsEKV05 KovacsEKV05 [240]	Proterv-II: An Integrated Production Planning and Scheduling System		real-life	0							223	433
MoffittPP05 MoffittPP05 [300]	Augmenting Disjunctive Temporal Problems with Finite-Domain Constraints			0							224	470
QuirogaZH05 QuirogaZH05 [357]	A Constraint Programming Approach to Tool Allocation and Resource Scheduling in FMS			0							225	499
Vilim05 Vilim05 [424]	Computing Explanations for the Unary Resource Constraint		benchmark	4							226	536
WolfS05 WolfS05 [444]	$O(n \log n)$ Overload Checking for the Cumulative Constraint and Its Application		real-world	0							227	548
WuBB05 WuBB05 [446]	Scheduling with Uncertain Start Dates		benchmark	0							228	550
ArtiguesBF04 ArtiguesBF04 [17]	A New Exact Solution Algorithm for the Job Shop Problem with Sequence-Dependent Setup Times		benchmark	0							229	295
HentenryckM04 HentenryckM04 [199]	Scheduling Abstractions for Local Search		benchmark	0							230	405
Hooker04 Hooker04 [204]	A Hybrid Method for Planning and Scheduling		random instance	0							231	411
KovacsV04 KovacsV04 [242]	Completable Partial Solutions in Constraint Programming and Constraint-Based Scheduling		industrial partner, benchmark, real-life	0							232	435
LimRX04 LimRX04 [264]	Solving the Crane Scheduling Problem Using Intelligent Search Schemes		generated instance	0							233	451
MaraveliasG04 MaraveliasG04 [292]	Using MILP and CP for the Scheduling of Batch Chemical Processes			0							234	466
Sadykov04 Sadykov04 [366]	A Hybrid Branch-And-Cut Algorithm for the One-Machine Scheduling Problem			0							235	504
Vilim04 Vilim04 [423]	O(n log n) Filtering Algorithms for Unary Resource Constraint		benchmark	1							236	535
VilimBC04 VilimBC04 [428]	Unary Resource Constraint with Optional Activities		benchmark, real-life	0							237	540

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VillaverdeP04 VillaverdeP04 [431]	An Investigation of Scheduling in Distributed Constraint Logic Programming			0							238	No
WolinskiKG04 WolinskiKG04 [445]	A Constraints Programming Approach to Communication Scheduling on SoPC Architectures			0							239	549
DannaP03 DannaP03 [104]	Structured vs. Unstructured Large Neighborhood Search: A Case Study on Job-Shop Scheduling Problems with Earliness and Tardiness Costs		benchmark	0							240	348
Kumar03 Kumar03 [248]	Incremental Computation of Resource-Envelopes in Producer-Consumer Models			0							241	440
OddiPCC03 OddiPCC03 [328]	Generating High Quality Schedules for a Spacecraft Memory Downlink Problem		benchmark	0							242	483
ValleMGT03 ValleMGT03 [414]	On Selecting and Scheduling Assembly Plans Using Constraint Programming		real-life	0							243	530
Vilim03 Vilim03 [422]	Computing Explanations for Global Scheduling Constraints			0							244	534
Wolf03 Wolf03 [443]	Pruning while Sweeping over Task Intervals		benchmark	0							245	547
Bartak02 Bartak02 [34]	Visopt ShopFloor: On the Edge of Planning and Scheduling		real-life	0							246	304
Bartak02a Bartak02a [33]	Visopt ShopFloor: Going Beyond Traditional Scheduling		benchmark, real-life	0							247	305
BeldiceanuC02 BeldiceanuC02 [49]	A New Multi-resource cumulatives Constraint with Negative Heights		real-life, random instance, benchmark	0							248	311
ElkhyariGJ02 ElkhyariGJ02 [127]	Conflict-Based Repair Techniques for Solving Dynamic Scheduling Problems			0							249	361
ElkhyariGJ02a ElkhyariGJ02a [128]	Solving Dynamic Resource Constraint Project Scheduling Problems Using New Constraint Programming Tools		benchmark, real-life	0							250	362
HookerY02 HookerY02 [209]	A Relaxation of the Cumulative Constraint			0							251	414
KamarainenS02 KamarainenS02 [219]	Local Probing Applied to Scheduling		real-world, benchmark	2							252	421
Muscettola02 Muscettola02 [312]	Computing the Envelope for Stepwise-Constant Resource Allocations			0							253	478
Vilim02 Vilim02 [421]	Batch Processing with Sequence Dependent Setup Times			0							254	533
ZhuS02 ZhuS02 [464]	A Meeting Scheduling System Based on Open Constraint Programming			0							255	558
VanczaM01 VanczaM01 [419]	A Constraint Engine for Manufacturing Process Planning		real-life, real-world	0							256	531
VerfaillieL01 VerfaillieL01 [420]	Selecting and Scheduling Observations for Agile Satellites: Some Lessons from the Constraint Reasoning Community Point of View			0							257	532
AngelsmarkJ00 AngelsmarkJ00 [11]	Some Observations on Durations, Scheduling and Allen's Algebra			0							258	289
FocacciLN00 FocacciLN00 [140]	Solving Scheduling Problems with Setup Times and Alternative Resources		real-world	0							259	365
KorbaaYG99 KorbaaYG99 [235]	Solving transient scheduling problem for cyclic production using timed Petri nets and constraint programming			0							260	431
CestaOS98 CestaOS98 [93]	Scheduling Multi-capacitated Resources Under Complex Temporal Constraints			0							261	340

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
FrostD98 FrostD98 [147]	Optimizing with Constraints: A Case Study in Scheduling Maintenance of Electric Power Units			0							262	371
GruianK98 GruianK98 [180]	Operation Binding and Scheduling for Low Power Using Constraint Logic Programming		benchmark	0							263	396
PembertonG98 PembertonG98 [338]	A constraint-based approach to satellite scheduling			0							264	489
RodosekW98 RodosekW98 [360]	A Generic Model and Hybrid Algorithm for Hoist Scheduling Problems		benchmark	0							265	502
BaptisteP97 BaptisteP97 [29]	Constraint Propagation and Decomposition Techniques for Highly Disjunctive and Highly Cumulative Project Scheduling Problems		benchmark	0							266	302
BeckDF97 BeckDF97 [42]	Five Pitfalls of Empirical Scheduling Research		benchmark, real-world	0							267	309
BoucherBVBL97 BoucherBVBL97 [79]	Multi-criteria Comparison Between Algorithmic, Constraint Logic and Specific Constraint Programming on a Real Schedulingt Problem			0							268	No
Caseau97 Caseau97 [91]	Using Constraint Propagation for Complex Scheduling Problems: Managing Size, Complex Resources and Travel		benchmark	0							269	338
PapeB97 PapeB97 [335]	A Constraint Programming Library for Preemptive and Non-Preemptive Scheduling			0							270	No
BrusoniCLMMT96 BrusoniCLMMT96 [85]	Resource-Based vs. Task-Based Approaches for Scheduling Problems			0							271	334
Colombani96 Colombani96 [102]	Constraint Programming: an Efficient and Practical Approach to Solving the Job-Shop Problem			0							272	347
Zhou96 Zhou96 [461]	A Constraint Program for Solving the Job-Shop Problem			0							273	556
Goltz95 Goltz95 [172]	Reducing Domains for Search in CLP(FD) and Its Application to Job-Shop Scheduling		benchmark	0							274	389
Puget95 Puget95 [353]	Applications of Constraint Programming		benchmark	0							275	497
Simonis95 Simonis95 [386]	The CHIP System and Its Applications			0							276	514
SimonisC95 SimonisC95 [388]	Modelling Producer/Consumer Constraints		real-life	0							277	515
Touraivane95 Touraivane95 [411]	Constraint Programming and Industrial Applications		real-life	0							278	529
JourdanFRD94 JourdanFRD94 [215]	Data Alignment and Task Scheduling On Parallel Machines Using Concurrent Constraint Model-based Programming			0							279	No
NuijtenA94 NuijtenA94 [326]	Constraint Satisfaction for Multiple Capacitated Job Shop Scheduling			0							280	482
Wallace94 Wallace94 [433]	Applying Constraints for Scheduling			0							281	No
BaptisteLV92 BaptisteLV92 [31]	Hoist scheduling problem: an approach based on constraint logic programming			0							282	301
ErtlK91 ErtlK91 [129]	Optimal Instruction Scheduling using Constraint Logic Programming		real-world, benchmark	0							283	363

3 Journal Articles

3.1 Articles from bibtex

Table 5: ARTICLEs from bibtex (Total 171)

Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
PrataAN23 PrataAN23	Bruno A. Prata, Levi R. Abreu, Marcelo S. Nagano	Applications of constraint programming in production scheduling problems: A descriptive bibliometric analysis	Yes	[352]	2024	Results in Control and Optimization	17	1128	1181
abs-2402-00459 abs-2402-00459	S. Nguyen, Dhananjay R. Thiruvady, Y. Sun, M. Zhang	Genetic-based Constraint Programming for Resource Constrained Job Scheduling	Yes	[317]	2024	CoRR	21	1180	1182
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	Yes	[110]	2023	Int. J. Prod. Res.	20	1018	1183
AkramNHRSA23 AkramNHRSA23	Bilal Omar Akram, Nor Kamariah Noordin, F. Hashim, Mohd Fadlee A. Rasid, Mustafa Ismael Salman, Abdulrahman M. Abdulghani	Joint Scheduling and Routing Optimization for Deterministic Hybrid Traffic in Time-Sensitive Networks Using Constraint Programming	Yes	[7]	2023	IEEE Access	16	1020	1184
AlfieriGPS23 AlfieriGPS23	A. Alfieri, M. Garraffa, E. Pastore, F. Salassa	Permutation flowshop problems minimizing core waiting time and core idle time	Yes	[9]	2023	Computers and Industrial Engineering	13	1021	1185
Caballero23 Caballero23	Jordi Coll Caballero	Scheduling through logic-based tools	Yes	[87]	2023	Constraints An Int. J.	1	1045	1186
CzerniachowskaWZ23 CzerniachowskaWZ23	C. Kateryna, W. Radosław, Żywicki, Krzysztof	Constraint Programming for Flexible Flow Shop Scheduling Problem with Repeated Jobs and Repeated Operations	Yes	[103]	2023	Advances in Science and Technology Research Journal	14	1048	1187
GurPAE23 GurPAE23	S. Gür, M. Pinarbasi, Haci Mehmet Alakas, T. Eren	Operating room scheduling with surgical team: a new approach with constraint programming and goal programming	Yes	[182]	2023	Central Eur. J. Oper. Res.	25	1066	1188
IsikYA23 IsikYA23	Eyüp Ensar Isik, Seyda Topaloglu Yildiz, Özge Satir Akpunar	Constraint programming models for the hybrid flow shop scheduling problem and its extensions	Yes	[213]	2023	Soft Comput.	28	1077	1189
LacknerMMWW23 LacknerMMWW23	M. Lackner, C. Mrkvicka, N. Musliu, D. Walkiewicz, F. Winter	Exact methods for the Oven Scheduling Problem	Yes	[254]	2023	Constraints An Int. J.	42	1090	1190
MontemanniD23 MontemanniD23	R. Montemanni, M. Dell'Amico	Solving the Parallel Drone Scheduling Traveling Salesman Problem via Constraint Programming	Yes	[305]	2023	Algorithms	13	1108	1191
MontemanniD23a MontemanniD23a	R. Montemanni, M. Dell'Amico	Constraint programming models for the parallel drone scheduling vehicle routing problem	Yes	[304]	2023	EURO J. Comput. Optim.	20	1109	1192
NaderiRR23 NaderiRR23	N. Bahman, R. Rubén, R. Vahid	Mixed-Integer Programming vs. Constraint Programming for Shop Scheduling Problems: New Results and Outlook	Yes	[313]	2023	INFORMS Journal on Computing	27	1111	1193
ShaikhK23 ShaikhK23	Aftab Ahmed Shaikh, Abdullah Ayub Khan	Management of electronic ledger: a constraint programming approach for solving curricula scheduling problems	Yes	[379]	2023	Int. J. Electron. Secur. Digit. Forensics	12	1140	1194
YuraszeckMCCR23 YuraszeckMCCR23	F. Yuraszeck, E. Montero, D. Canut-de-Bon, N. Cuneo, M. Rojel	A Constraint Programming Formulation of the Multi-Mode Resource-Constrained Project Scheduling Problem for the Flexible Job Shop Scheduling Problem	Yes	[453]	2023	IEEE Access	11	1161	1195
abs-2305-19888 abs-2305-19888	V. Heinz, A. Novák, M. Vlk, Z. Hanzálek	Constraint Programming and Constructive Heuristics for Parallel Machine Scheduling with Sequence-Dependent Setups and Common Servers	Yes	[197]	2023	CoRR	42	1177	1196
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 Programming	Yes	[401]	2023	CoRR	9	1178	1197
abs-2312-13682 abs-2312-13682	G. Perez, G. Glorian, W. Suijlen, A. Lallouet	A Constraint Programming Model for Scheduling the Unloading of Trains in Ports: Extended	Yes	[340]	2023	CoRR	20	1179	1198
AbreuN22 AbreuN22	Levi Ribeiro de Abreu, Marcelo Seido Nagano	A new hybridization of adaptive large neighborhood search with constraint programming for open shop scheduling with sequence-dependent setup times	Yes	[109]	2022	Comput. Ind. Eng.	20	1017	1199
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)	Yes	[81]	2022	Int. J. Prod. Res.	19	1043	1200
CampeauG22 CampeauG22	L. Campeau, M. Gamache	Short- and medium-term optimization of underground mine planning using constraint programming	Yes	[88]	2022	Constraints An Int. J.	18	1046	1201

Table 5: ARTICLEs from bibtex (Total 171)

Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
ColT22 ColT22	Giacomo Da Col, Erich Christian Teppan	Industrial-size job shop scheduling with constraint programming	Yes	[101]	2022	Operations Research Perspectives	19	1047	1202
FarsiTM22 FarsiTM22	A. Farsi, S. Ali Torabi, M. Mokhtarzadeh	Integrated surgery scheduling by constraint programming and meta-heuristics	No	[137]	2022	International Journal of Management Science and Engineering Management	null	No	1203
Fatemi-AnarakiMFN22 Fatemi-AnarakiMFN22	S. Fatemi-Anaraki, R. Tavakkoli-Moghaddam, M. Foumani, B. Vahedi-Nouri	Scheduling of Multi-Robot Job Shop Systems in Dynamic Environments: Mixed-Integer Linear Programming and Constraint Programming Approaches	No	[138]	2022	Omega	null	No	1204
FetgoD22 FetgoD22	Sévérine Betmbe Fetgo, Clémentin Tayou Djamégni	Horizontally Elastic Edge-Finder Algorithm for Cumulative Resource Constraint Revisited	Yes	[139]	2022	Oper. Res. Forum	32	1058	1205
HeinzNVH22 HeinzNVH22	V. Heinz, A. Novák, M. Vlk, Z. Hanzálek	Constraint Programming and constructive heuristics for parallel machine scheduling with sequence-dependent setups and common servers	Yes	[196]	2022	Comput. Ind. Eng.	16	1070	1206
MullerMKP22 MullerMKP22	D. Müller, Marcus Gerhard Müller, D. Kress, E. Pesch	An algorithm selection approach for the flexible job shop scheduling problem: Choosing constraint programming solvers through machine learning	Yes	[309]	2022	Eur. J. Oper. Res.	18	1110	1207
PohlAK22 PohlAK22	M. Pohl, C. Artigues, R. Kolisch	Solving the time-discrete winter runway scheduling problem: A column generation and constraint programming approach	Yes	[345]	2022	Eur. J. Oper. Res.	16	1125	1208
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	[380]	2022	Int. J. Prod. Res.	18	No	1209
SubulanC22 SubulanC22	K. Subulan, G. Çakir	Constraint programming-based transformation approach for a mixed fuzzy-stochastic resource investment project scheduling problem	Yes	[391]	2022	Soft Comput.	38	1146	1210
YunusogluY22 YunusogluY22	P. Yunusoglu, Seyda Topaloglu Yildiz	Constraint programming approach for multi-resource-constrained unrelated parallel machine scheduling problem with sequence-dependent setup times	Yes	[450]	2022	Int. J. Prod. Res.	18	1160	1211
YuraszeckMPV22 YuraszeckMPV22	F. Yuraszeck, G. Mejía, J. Pereira, M. Vilà	A Novel Constraint Programming Decomposition Approach for the Total Flow Time Fixed Group Shop Scheduling Problem	Yes	[452]	2022	Mathematics	26	1162	1212
abs-2211-14492 abs-2211-14492	Y. Sun, S. Nguyen, Dhananjay R. Thiruvady, X. Li, Andreas T. Ernst, U. Aickelin	Enhancing Constraint Programming via Supervised Learning for Job Shop Scheduling	Yes	[392]	2022	CoRR	17	1176	1213
AbohashimaEG21 AbohashimaEG21	H. Abohashima, Amr B. Eltawil, Mohamed S. Gheith	A Mathematical Programming Model and a Firefly-Based Heuristic for Real-Time Traffic Signal Scheduling With Physical Constraints	Yes	[2]	2021	IEEE Access	14	1015	1214
AbreuAPNM21 AbreuAPNM21	Levi Ribeiro de Abreu, Kennedy A. G. Araújo, Bruno de Athayde Prata, Marcelo Seido Nagano, J. V. Moccellin	A new variable neighbourhood search with a constraint programming search strategy for the open shop scheduling problem with operation repetitions	Yes	[108]	2021	Engineering Optimization	21	1016	1215
Bedhief21 Bedhief21	Asma Ouled Bedhief	Comparing Mixed-Integer Programming and Constraint Programming Models for the Hybrid Flow Shop Scheduling Problem with Dedicated Machines	Yes	[44]	2021	Journal Européen des Systèmes Automatisés	7	1031	1216
FanXG21 FanXG21	H. Fan, H. Xiong, M. Goh	Genetic programming-based hyper-heuristic approach for solving dynamic job shop scheduling problem with extended technical precedence constraints	Yes	[136]	2021	Comput. Oper. Res.	15	1057	1217
HamPK21 HamPK21	A. Ham, M. Park, Kyung Min Kim	Energy-Aware Flexible Job Shop Scheduling Using Mixed Integer Programming and Constraint Programming	Yes	[185]	2021	Mathematical Problems in Engineering	12	1069	1218
HubnerGSV21 HubnerGSV21	F. Hübner, P. Gerhards, C. Stürck, R. Volk	Solving the nuclear dismantling project scheduling problem by combining mixed-integer and constraint programming techniques and metaheuristics	Yes	[211]	2021	J. Sched.	22	1076	1219
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 constraints	Yes	[234]	2021	Constraints An Int. J.	51	1082	1220

Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
PandeyS21a PandeyS21a	V. Pandey, P. Saini	Constraint programming versus heuristic approach to MapReduce scheduling problem in Hadoop YARN for energy minimization	Yes	[334]	2021	J. Supercomput.	29	1122	1221
QinWSLS21 QinWSLS21	M. Qin, R. Wang, Z. Shi, L. Liu, L. Shi	A Genetic Programming-Based Scheduling Approach for Hybrid Flow Shop With a Batch Processor and Waiting Time Constraint	Yes	[354]	2021	IEEE Trans Autom. Sci. Eng.	12	1130	1222
VlkHT21 VlkHT21	M. Vlk, Z. Hanzálek, S. Tang	Constraint programming approaches to joint routing and scheduling in time-sensitive networks	Yes	[432]	2021	Comput. Ind. Eng.	14	1154	1223
ZhangYW21 ZhangYW21	L. Zhang, C. Yu, T. N. Wong	A graph-based constraint programming approach for the integrated process planning and scheduling problem	Yes	[458]	2021	Comput. Oper. Res.	10	1167	1224
abs-2102-08778 abs-2102-08778	Giacomo Da Col, E. Teppan	Large-Scale Benchmarks for the Job Shop Scheduling Problem	Yes	[99]	2021	CoRR	10	1175	1225
AlizdehS20 AlizdehS20	S. Alizdeh, S. Saeidi	Fuzzy project scheduling with critical path including risk and resource constraints using linear programming	No	[10]	2020	Int. J. Adv. Intell. Paradigms	14	No	1226
AstrandJZ20 AstrandJZ20	M. Åstrand, M. Johansson, A. Zanarini	Underground mine scheduling of mobile machines using Constraint Programming and Large Neighborhood Search	Yes	[23]	2020	Comput. Oper. Res.	13	1023	1227
BadicaBI20 BadicaBI20	A. Badica, C. Badica, M. Ivanovic	Block structured scheduling using constraint logic programming	Yes	[24]	2020	AI Commun.	17	1024	1228
BenediktMH20 BenediktMH20	O. Benedikt, I. Módos, Z. Hanzálek	Power of pre-processing: production scheduling with variable energy pricing and power-saving states	Yes	[55]	2020	Constraints An Int. J.	19	1036	1229
FallahiAC20 FallahiAC20	Abdellah El Fallahi, El Yaakoubi Anass, M. Cherkaoui	Tabu search and constraint programming-based approach for a real scheduling and routing problem	Yes	[135]	2020	International Journal of Applied Management Science	18	1056	1230
LunardiBLRV20 LunardiBLRV20	Willian T. Lunardi, Ernesto G. Birgin, P. Laborie, Débora P. Ronconi, H. Voos	Mixed Integer linear programming and constraint programming models for the online printing shop scheduling problem	Yes	[283]	2020	Comput. Oper. Res.	20	1101	1231
MejiaY20 MejiaY20	G. Mejía, F. Yuraszeck	A self-tuning variable neighborhood search algorithm and an effective decoding scheme for open shop scheduling problems with travel/setup times	Yes	[296]	2020	Eur. J. Oper. Res.	13	1105	1232
MengZRZL20 MengZRZL20	L. Meng, C. Zhang, Y. Ren, B. Zhang, C. Lv	Mixed-integer linear programming and constraint programming formulations for solving distributed flexible job shop scheduling problem	Yes	[298]	2020	Comput. Ind. Eng.	13	1106	1233
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	Yes	[301]	2020	Int. J. Comput. Integr. Manuf.	14	1107	1234
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	Yes	[346]	2020	Int. J. Prod. Res.	18	1126	1235
QinDCS20 QinDCS20	T. Qin, Y. Du, Jiang Hang Chen, M. Sha	Combining mixed integer programming and constraint programming to solve the integrated scheduling problem of container handling operations of a single vessel	Yes	[355]	2020	Eur. J. Oper. Res.	18	1129	1236
SacramentoSP20 SacramentoSP20	D. Sacramento, C. Solnon, D. Pisinger	Constraint Programming and Local Search Heuristic: a Matheuristic Approach for Routing and Scheduling Feeder Vessels in Multi-terminal Ports	Yes	[365]	2020	Oper. Res. Forum	33	1134	1237
WallaceY20 WallaceY20	M. Wallace, N. Yorke-Smith	A new constraint programming model and solving for the cyclic hoist scheduling problem	Yes	[435]	2020	Constraints An Int. J.	19	1156	1238
ZouZ20 ZouZ20	X. Zou, L. Zhang	A constraint programming approach for scheduling repetitive projects with atypical activities considering soft logic	Yes	[467]	2020	Automation in Construction	10	1169	1239
EscobetPQPRA19 EscobetPQPRA19	T. Escobet, V. Puig, J. Quevedo, P. Palà-Schönwälder, J. Romera, W. Adelman	Optimal batch scheduling of a multiproduct dairy process using a combined optimization/constraint programming approach	Yes	[130]	2019	Comput. Chem. Eng.	10	1052	1240
GurEA19 GurEA19	Şeyda Gür, T. Eren, Hacı Mehmet Alakaş	Surgical Operation Scheduling with Goal Programming and Constraint Programming: A Case Study	Yes	[468]	2019	Mathematics	24	1065	1241

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Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
NishikawaSTT19 NishikawaSTT19	H. Nishikawa, K. Shimada, I. Taniguchi, H. Tomiyama	A Constraint Programming Approach to Scheduling of Malleable Tasks	Yes	[320]	2019	Int. J. Netw. Comput.	16	1114	1242
Novas19 Novas19	Juan M. Novas	Production scheduling and lot streaming at flexible job-shops environments using constraint programming	Yes	[322]	2019	Comput. Ind. Eng.	13	1116	1243
WikarekS19 WikarekS19	J. Wikarek, P. Sitek	A Constraint-Based Declarative Programming Framework for Scheduling and Resource Allocation Problems	Yes	[441]	2019	Vietnam. J. Comput. Sci.	22	1158	1244
YounespourAKE19 YounespourAKE19	M. Younespour, A. Atighehchian, K. Kianfar, Ehsan Tarkesh Esfahani	Using mixed integer programming and constraint programming for operating rooms scheduling with modified block strategy	Yes	[448]	2019	Operations research for health care	11	1159	1245
abs-1901-07914 abs-1901-07914	Jan Kristof Behrens, R. Lange, M. Mansouri	A Constraint Programming Approach to Simultaneous Task Allocation and Motion Scheduling for Industrial Dual-Arm Manipulation Tasks	Yes	[47]	2019	CoRR	8	1171	1246
abs-1902-01193 abs-1902-01193	O. M. Alade, A. O. Amusat	Solving Nurse Scheduling Problem Using Constraint Programming Technique	Yes	[8]	2019	CoRR	9	1172	1247
abs-1902-09244 abs-1902-09244	Viktoria A. Hauder, A. Beham, S. Raggl, Sophie N. Parragh, M. Affenzeller	On constraint programming for a new flexible project scheduling problem with resource constraints	Yes	[187]	2019	CoRR	62	1173	1248
abs-1911-04766 abs-1911-04766	T. Geibinger, F. Mischek, N. Musliu	Investigating Constraint Programming and Hybrid Methods for Real World Industrial Test Laboratory Scheduling	Yes	[158]	2019	CoRR	16	1174	1249
BaptisteB18 BaptisteB18	P. Baptiste, N. Bonifas	Redundant cumulative constraints to compute preemptive bounds	Yes	[27]	2018	Discret. Appl. Math.	10	1025	1250
BorghesiBLMB18 BorghesiBLMB18	A. Borghesi, A. Bartolini, M. Lombardi, M. Milano, L. Benini	Scheduling-based power capping in high performance computing systems	Yes	[78]	2018	Sustain. Comput. Informatics Syst.	13	1042	1251
FahimiOQ18 FahimiOQ18	H. Fahimi, Y. Ouellet, C. Quimper	Linear-time filtering algorithms for the disjunctive constraint and a quadratic filtering algorithm for the cumulative not-first not-last	Yes	[133]	2018	Constraints An Int. J.	22	1054	1252
GedikKEK18 GedikKEK18	R. Gedik, D. Kalathia, G. Egilmez, E. Kirac	A constraint programming approach for solving unrelated parallel machine scheduling problem	Yes	[156]	2018	Comput. Ind. Eng.	11	1061	1253
GokgurHO18 GokgurHO18	B. Gökgür, B. Hnich, S. Özpeynirci	Parallel machine scheduling with tool loading: a constraint programming approach	Yes	[170]	2018	Int. J. Prod. Res.	17	1063	1254
Ham18 Ham18	A. Ham	Integrated scheduling of m-truck, m-drone, and m-depot constrained by time-window, drop-pickup, and m-visit using constraint programming	Yes	[184]	2018	Transportation Research Part C: Emerging Technologies	14	1068	1255
LaborieRSV18 LaborieRSV18	P. Laborie, J. Rogerie, P. Shaw, P. Vilím	IBM ILOG CP optimizer for scheduling - 20+ years of scheduling with constraints at IBM/ILOG	Yes	[252]	2018	Constraints An Int. J.	41	1089	1256
PourDERB18 PourDERB18	Shahrzad M. Pour, John H. Drake, Lena Secher Ejlertsen, Kourosh Marjani Rasmussen, Edmund K. Burke	A hybrid Constraint Programming/Mixed Integer Programming framework for the preventive signaling maintenance crew scheduling problem	Yes	[348]	2018	Eur. J. Oper. Res.	12	1127	1257
ShinBBHO18 ShinBBHO18	Seung Yeob Shin, Y. Brun, H. Balasubramanian, Philip L. Henneman, Leon J. Osterweil	Discrete-Event Simulation and Integer Linear Programming for Constraint-Aware Resource Scheduling	Yes	[381]	2018	IEEE Trans. Syst. Man Cybern. Syst.	16	1141	1258
TangLWSK18 TangLWSK18	Y. Tang, R. Liu, F. Wang, Q. Sun, Amr A. Kandil	Scheduling Optimization of Linear Schedule with Constraint Programming	Yes	[398]	2018	Comput. Aided Civ. Infrastructure Eng.	28	1148	1259
ZhangW18 ZhangW18	S. Zhang, S. Wang	Flexible Assembly Job-Shop Scheduling With Sequence-Dependent Setup Times and Part Sharing in a Dynamic Environment: Constraint Programming Model, Mixed-Integer Programming Model, and Dispatching Rules	Yes	[459]	2018	IEEE Trans. Engineering Management	18	1166	1260
KreterSS17 KreterSS17	S. Kreter, A. Schutt, Peter J. Stuckey	Using constraint programming for solving RCPSP/max-cal	Yes	[246]	2017	Constraints An Int. J.	31	1087	1261
NattafAL17 NattafAL17	M. Nattaf, C. Artigues, P. Lopez	Cumulative scheduling with variable task profiles and concave piecewise linear processing rate functions	Yes	[315]	2017	Constraints An Int. J.	18	1113	1262
Bonfietti16 Bonfietti16	A. Bonfietti	A constraint programming scheduling solver for the MPOpt programming environment	Yes	[69]	2016	Intelligenza Artificiale	13	1040	1263

Table 5: ARTICLEs from bibtex (Total 171)

Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
BridiBLMB16 BridiBLMB16	T. Bridi, A. Bartolini, M. Lombardi, M. Milano, L. Benini	A Constraint Programming Scheduler for Heterogeneous High-Performance Computing Machines	Yes	[83]	2016	IEEE Trans. Parallel Distributed Syst.	14	1044	1264
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	Yes	[124]	2016	INFORMS J. Comput.	17	1051	1265
NovaraNH16 NovaraNH16	Franco M. Novara, Juan M. Novas, Gabriela P. Henning	A novel constraint programming model for large-scale scheduling problems in multiproduct multistage batch plants: Limited resources and campaign-based operation	Yes	[321]	2016	Comput. Chem. Eng.	17	1115	1266
ZarandiKS16 ZarandiKS16	M. H. Fazel Zarandi, H. Khorshidian, Mohsen Akbarpour Shirazi	A constraint programming model for the scheduling of JIT cross-docking systems with preemption	Yes	[454]	2016	J. Intell. Manuf.	17	1163	1267
EvenSH15a EvenSH15a	C. Even, A. Schutt, Pascal Van Hentenryck	A Constraint Programming Approach for Non-Preemptive Evacuation Scheduling	Yes	[132]	2015	CoRR	16	1053	1268
GoelSHFS15 GoelSHFS15	V. Goel, M. Slusky, Willem-Jan van Hoeve, Kevin C. Furman, Y. Shao	Constraint programming for LNG ship scheduling and inventory management	Yes	[169]	2015	Eur. J. Oper. Res.	12	1062	1269
Kameugne15 Kameugne15	R. Kameugne	Propagation techniques of resource constraint for cumulative scheduling	Yes	[220]	2015	Constraints An Int. J.	2	1078	1270
LetortCB15 LetortCB15	A. Letort, M. Carlsson, N. Beldiceanu	Synchronized sweep algorithms for scalable scheduling constraints	Yes	[261]	2015	Constraints An Int. J.	52	1092	1271
NattafAL15 NattafAL15	M. Nattaf, C. Artigues, P. Lopez	A hybrid exact method for a scheduling problem with a continuous resource and energy constraints	Yes	[314]	2015	Constraints An Int. J.	21	1112	1272
Siala15 Siala15	M. Siala	Search, propagation, and learning in sequencing and scheduling problems	Yes	[382]	2015	Constraints An Int. J.	2	1142	1273
SimoninAHL15 SimoninAHL15	G. Simonin, C. Artigues, E. Hebrard, P. Lopez	Scheduling scientific experiments for comet exploration	Yes	[385]	2015	Constraints An Int. J.	23	1143	1274
WangMD15 WangMD15	T. Wang, N. Meskens, D. Duvivier	Scheduling operating theatres: Mixed integer programming vs. constraint programming	Yes	[438]	2015	Eur. J. Oper. Res.	13	1157	1275
BonfiettiLBM14 BonfiettiLBM14	A. Bonfietti, M. Lombardi, L. Benini, M. Milano	CROSS cyclic resource-constrained scheduling solver	Yes	[72]	2014	Artif. Intell.	28	1041	1276
GrimesIOS14 GrimesIOS14	D. Grimes, G. Ifrim, B. O'Sullivan, H. Simonis	Analyzing the impact of electricity price forecasting on energy cost-aware scheduling	Yes	[177]	2014	Sustain. Comput. Informatics Syst.	16	1064	1277
KameugneFSN14 KameugneFSN14	R. Kameugne, Laure Pauline Fotso, Joseph D. Scott, Y. Ngo-Kateu	A quadratic edge-finding filtering algorithm for cumulative resource constraints	Yes	[224]	2014	Constraints An Int. J.	27	1079	1278
NovasH14 NovasH14	Juan M. Novas, Gabriela P. Henning	Integrated scheduling of resource-constrained flexible manufacturing systems using constraint programming	Yes	[325]	2014	Expert Syst. Appl.	14	1119	1279
BegB13 BegB13	Mirza Omer Beg, Peter van Beek	A constraint programming approach for integrated spatial and temporal scheduling for clustered architectures	Yes	[45]	2013	ACM Trans. Embed. Comput. Syst.	23	1032	1280
HeinzSB13 HeinzSB13	S. Heinz, J. Schulz, J. Christopher Beck	Using dual presolving reductions to reformulate cumulative constraints	Yes	[195]	2013	Constraints An Int. J.	36	1071	1281
OzturkTHO13 OzturkTHO13	C. Öztürk, S. Tunali, B. Hnich, M. Arslan Ornek	Balancing and scheduling of flexible mixed model assembly lines	Yes	[333]	2013	Constraints An Int. J.	36	1121	1282
HeinzSSW12 HeinzSSW12	S. Heinz, T. Schlechte, R. Stephan, M. Winkler	Solving steel mill slab design problems	Yes	[193]	2012	Constraints An Int. J.	12	1072	1283
LimtanyakulS12 LimtanyakulS12	K. Limtanyakul, U. Schwiegelshohn	Improvements of constraint programming and hybrid methods for scheduling of tests on vehicle prototypes	Yes	[268]	2012	Constraints An Int. J.	32	1094	1284
LombardiM12 LombardiM12	M. Lombardi, M. Milano	Optimal methods for resource allocation and scheduling: a cross-disciplinary survey	Yes	[278]	2012	Constraints An Int. J.	35	1096	1285
LombardiM12a LombardiM12a	M. Lombardi, M. Milano	A min-flow algorithm for Minimal Critical Set detection in Resource Constrained Project Scheduling	Yes	[277]	2012	Artif. Intell.	10	1097	1286
NovasH12 NovasH12	Juan M. Novas, Gabriela P. Henning	A comprehensive constraint programming approach for the rolling horizon-based scheduling of automated wet-etch stations	Yes	[324]	2012	Comput. Chem. Eng.	17	1118	1287
BartakS11 BartakS11	R. Barták, Miguel A. Salido	Constraint satisfaction for planning and scheduling problems	Yes	[37]	2011	Constraints An Int. J.	5	1028	1288

Table 5: ARTICLEs from bibtex (Total 171)

Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
BeckFW11 BeckFW11	J. Christopher Beck, T. K. Feng, J. Watson	Combining Constraint Programming and Local Search for Job-Shop Scheduling	Yes	[43]	2011	INFORMS J. Comput.	14	1030	1289
BeldiceanuCDP11 BeldiceanuCDP11	N. Beldiceanu, M. Carlsson, S. Demassey, E. Poder	New filtering for the *cumulative* constraint in the context of non-overlapping rectangles	Yes	[50]	2011	Ann. Oper. Res.	24	1034	1290
BeniniLMR11 BeniniLMR11	L. Benini, M. Lombardi, M. Milano, M. Ruggiero	Optimal resource allocation and scheduling for the CELL BE platform	Yes	[58]	2011	Ann. Oper. Res.	27	1037	1291
HachemiGR11 HachemiGR11	Nizar El Hachemi, M. Gendreau, L. Rousseau	A hybrid constraint programming approach to the log-truck scheduling problem	Yes	[183]	2011	Ann. Oper. Res.	16	1067	1292
KelbelH11 KelbelH11	J. Kelbel, Z. Hanzálek	Solving production scheduling with earliness/tardiness penalties by constraint programming	Yes	[227]	2011	J. Intell. Manuf.	10	1080	1293
KovacsB11 KovacsB11	A. Kovács, J. Christopher Beck	A global constraint for total weighted completion time for unary resources	Yes	[239]	2011	Constraints An Int. J.	24	1085	1294
KovacsK11 KovacsK11	A. Kovács, T. Kis	Constraint programming approach to a bilevel scheduling problem	Yes	[241]	2011	Constraints An Int. J.	24	1086	1295
SchausHMCMD11 SchausHMCMD11	P. Schaus, Pascal Van Hentenryck, J. Monette, C. Coffrin, L. Michel, Y. Deville	Solving Steel Mill Slab Problems with constraint-based techniques: CP, LNS, and CBLS	Yes	[369]	2011	Constraints An Int. J.	23	1137	1296
SchuttFSW11 SchuttFSW11	A. Schutt, T. Feydy, Peter J. Stuckey, Mark G. Wallace	Explaining the cumulative propagator	Yes	[375]	2011	Constraints An Int. J.	33	1139	1297
TopalogluO11 TopalogluO11	S. Topaloglu, I. Ozkarahan	A constraint programming-based solution approach for medical resident scheduling problems	Yes	[409]	2011	Comput. Oper. Res.	10	1150	1298
TrojetHL11 TrojetHL11	M. Trojet, F. H'Mida, P. Lopez	Project scheduling under resource constraints: Application of the cumulative global constraint in a decision support framework	Yes	[412]	2011	Comput. Ind. Eng.	7	1151	1299
BartakCS10 BartakCS10	R. Barták, O. Cepek, P. Surynek	Discovering implied constraints in precedence graphs with alternatives	Yes	[36]	2010	Ann. Oper. Res.	31	1027	1300
BartakSR10 BartakSR10	R. Barták, Miguel A. Salido, F. Rossi	New trends in constraint satisfaction, planning, and scheduling: a survey	Yes	[38]	2010	Knowl. Eng. Rev.	31	1029	1301
LombardiM10a LombardiM10a	M. Lombardi, M. Milano	Allocation and scheduling of Conditional Task Graphs	Yes	[275]	2010	Artif. Intell.	30	1095	1302
LopesCSM10 LopesCSM10	Tony Minoru Tamura Lopes, André A. Ciré, Cid Carvalho de Souza, Arnaldo Vieira Moura	A hybrid model for a multiproduct pipeline planning and scheduling problem	Yes	[280]	2010	Constraints An Int. J.	39	1098	1303
NovasH10 NovasH10	Juan M. Novas, Gabriela P. Henning	Reactive scheduling framework based on domain knowledge and constraint programming	Yes	[323]	2010	Comput. Chem. Eng.	20	1117	1304
ZeballosQH10 ZeballosQH10	L. Zeballos, O. Quiroga, Gabriela P. Henning	A constraint programming model for the scheduling of flexible manufacturing systems with machine and tool limitations	Yes	[456]	2010	Eng. Appl. Artif. Intell.	20	1165	1305
BocewiczBB09 BocewiczBB09	G. Bocewicz, I. Bach, Zbigniew Antoni Banaszak	Logic-algebraic method based and constraints programming driven approach to AGVs scheduling	Yes	[65]	2009	Int. J. Intell. Inf. Database Syst.	19	1039	1306
GarridoAO09 GarridoAO09	A. Garrido, M. Arangú, E. Onaindia	A constraint programming formulation for planning: from plan scheduling to plan generation	Yes	[150]	2009	J. Sched.	30	1059	1307
RuggieroBBMA09 RuggieroBBMA09	M. Ruggiero, D. Bertozzi, L. Benini, M. Milano, A. Andrei	Reducing the Abstraction and Optimality Gaps in the Allocation and Scheduling for Variable Voltage/Frequency MPSoC Platforms	Yes	[364]	2009	IEEE Trans. Comput. Aided Des. Integr. Circuits Syst.	14	1133	1308
abs-0907-0939 abs-0907-0939	T. Petit, E. Poder	The Soft Cumulative Constraint	Yes	[342]	2009	CoRR	12	1170	1309
GarridoOS08 GarridoOS08	A. Garrido, E. Onaindia, Óscar Sapena	Planning and scheduling in an e-learning environment. A constraint-programming-based approach	Yes	[151]	2008	Eng. Appl. Artif. Intell.	11	1060	1310
KovacsB08 KovacsB08	A. Kovács, J. Christopher Beck	A global constraint for total weighted completion time for cumulative resources	Yes	[238]	2008	Eng. Appl. Artif. Intell.	7	1084	1311
LiessM08 LiessM08	O. Liess, P. Michelon	A constraint programming approach for the resource-constrained project scheduling problem	Yes	[263]	2008	Ann. Oper. Res.	12	1093	1312
MalikMB08 MalikMB08	Abid M. Malik, J. McInnes, Peter van Beek	Optimal Basic Block Instruction Scheduling for Multiple-Issue Processors Using Constraint Programming	Yes	[291]	2008	Int. J. Artif. Intell. Tools	18	1102	1313

Table 5: ARTICLEs from bibtex (Total 171)

Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
Rodriguez07 Rodriguez07	J. Rodriguez	A constraint programming model for real-time train scheduling at junctions	Yes	[362]	2007	Transportation Research Part B: Methodological	15	1131	1314
Simonis07 Simonis07	H. Simonis	Models for Global Constraint Applications	Yes	[387]	2007	Constraints An Int. J.	30	1144	1315
Hooker06 Hooker06	John N. Hooker	An Integrated Method for Planning and Scheduling to Minimize Tardiness	Yes	[207]	2006	Constraints An Int. J.	19	1075	1316
KhayatLR06 KhayatLR06	Ghada El Khayat, A. Langevin, D. Riopel	Integrated production and material handling scheduling using mathematical programming and constraint programming	Yes	[229]	2006	Eur. J. Oper. Res.	15	1081	1317
SadykovW06 SadykovW06	R. Sadykov, Laurence A. Wolsey	Integer Programming and Constraint Programming in Solving a Multimachine Assignment Scheduling Problem with Deadlines and Release Dates	Yes	[367]	2006	INFORMS J. Comput.	9	1135	1318
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	Yes	[394]	2006	Int. J. Parallel Emergent Distributed Syst.	19	1147	1319
Hooker05 Hooker05	John N. Hooker	A Hybrid Method for the Planning and Scheduling	Yes	[205]	2005	Constraints An Int. J.	17	1074	1320
VilimBC05 VilimBC05	P. Vilím, R. Barták, O. Cepek	Extension of $O(n \log n)$ Filtering Algorithms for the Unary Resource Constraint to Optional Activities	Yes	[429]	2005	Constraints An Int. J.	23	1153	1321
ZeballosH05 ZeballosH05	L. Zeballos, Gabriela P. Henning	A Constraint Programming Approach to FMS Scheduling. Consideration of Storage and Transportation Resources	Yes	[455]	2005	Inteligencia Artif.	10	1164	1322
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 consumption	Yes	[344]	2004	Eur. J. Oper. Res.	16	1124	1323
KuchcinskiW03 KuchcinskiW03	K. Kuchcinski, C. Wolinski	Global approach to assignment and scheduling of complex behaviors based on HCDG and constraint programming	Yes	[247]	2003	J. Syst. Archit.	15	1088	1324
Tsang03 Tsang03	Edward P. K. Tsang	Constraint Based Scheduling: Applying Constraint Programming to Scheduling Problems	Yes	[413]	2003	J. Sched.	2	1152	1325
LorigeonBB02 LorigeonBB02	T. Lorigeon, J. Billaut, J. Bouquard	A dynamic programming algorithm for scheduling jobs in a two-machine open shop with an availability constraint	Yes	[282]	2002	J. Oper. Res. Soc.	8	1100	1326
RodriguezDG02 RodriguezDG02	J. Rodriguez, X. Delorme, X. Gandibleux	Railway infrastructure saturation using constraint programming approach	Yes	[361]	2002	Computers in Railways VIII	10	1132	1327
Timpe02 Timpe02	C. Timpe	Solving planning and scheduling problems with combined integer and constraint programming	Yes	[407]	2002	OR Spectr.	18	1149	1328
MartinPY01 MartinPY01	F. Martin, A. Pinkney, X. Yu	Cane Railway Scheduling via Constraint Logic Programming: Labelling Order and Constraints in a Real-Life Application	Yes	[293]	2001	Ann. Oper. Res.	17	1103	1329
Mason01 Mason01	Andrew J. Mason	Elastic Constraint Branching, the Wedelin/Carmen Lagrangian Heuristic and Integer Programming for Personnel Scheduling	Yes	[294]	2001	Ann. Oper. Res.	38	1104	1330
ArtiguesR00 ArtiguesR00	C. Artigues, F. Roubellat	A polynomial activity insertion algorithm in a multi-resource schedule with cumulative constraints and multiple modes	Yes	[18]	2000	Eur. J. Oper. Res.	20	1022	1331
BaptisteP00 BaptisteP00	P. Baptiste, Claude Le Pape	Constraint Propagation and Decomposition Techniques for Highly Disjunctive and Highly Cumulative Project Scheduling Problems	Yes	[30]	2000	Constraints An Int. J.	21	1026	1332
HeipckeCCS00 HeipckeCCS00	S. Heipcke, Y. Colombani, Cristina C. B. Cavalcante, Cid C. de Souza	Scheduling under Labour Resource Constraints	Yes	[198]	2000	Constraints An Int. J.	8	1073	1333
KorbaaYG00 KorbaaYG00	O. Korbaa, P. Yim, J. Gentina	Solving Transient Scheduling Problems with Constraint Programming	Yes	[236]	2000	Eur. J. Control	10	1083	1334
LopezAKYG00 LopezAKYG00	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 J.-C. Gentina	Yes	[281]	2000	Eur. J. Control	4	1099	1335
SakkoutW00 SakkoutW00	Hani El Sakkout, M. Wallace	Probe Backtrack Search for Minimal Perturbation in Dynamic Scheduling	Yes	[368]	2000	Constraints An Int. J.	30	1136	1336

Table 5: ARTICLEs from bibtex (Total 171)

Key	Authors	Title	LC	Cite	Year	Conference /Journal	Pages	b	c
SchildW00 SchildW00	K. Schild, J. Würtz	Scheduling of Time-Triggered Real-Time Systems	Yes	[370]	2000	Constraints An Int. J.	23	1138	1337
SourdN00 SourdN00	F. Sourd, W. Nuijten	Multiple-Machine Lower Bounds for Shop-Scheduling Problems	Yes	[389]	2000	INFORMS J. Comput.	12	1145	1338
BensanaLV99 BensanaLV99	E. Bensana, M. Lemaître, G. Verfaillie	Earth Observation Satellite Management	Yes	[59]	1999	Constraints An Int. J.	7	1038	1339
BelhadjiI98 BelhadjiI98	S. Belhadji, A. Isli	Temporal Constraint Satisfaction Techniques in Job Shop Scheduling Problem Solving	Yes	[53]	1998	Constraints An Int. J.	9	1035	1340
NuijtenP98 NuijtenP98	W. Nuijten, Claude Le Pape	Constraint-Based Job Shop Scheduling with \sc Ilog Scheduler	Yes	[327]	1998	J. Heuristics	16	1120	1341
PapaB98 PapaB98	Claude Le Pape, P. Baptiste	Resource Constraints for Preemptive Job-shop Scheduling	Yes	[336]	1998	Constraints An Int. J.	25	1123	1342
Darby-DowmanLMZ97 Darby-DowmanLMZ97	K. Darby-Dowman, J. Little, G. Mitra, M. Zaffalon	Constraint Logic Programming and Integer Programming Approaches and Their Collaboration in Solving an Assignment Scheduling Problem	Yes	[105]	1997	Constraints An Int. J.	20	1049	1343
FalaschiGMP97 FalaschiGMP97	M. Falaschi, M. Gabbrielli, K. Marriott, C. Palamidessi	Constraint Logic Programming with Dynamic Scheduling: A Semantics Based on Closure Operators	Yes	[134]	1997	Inf. Comput.	27	1055	1344
LammaMM97 LammaMM97	E. Lamma, P. Mello, M. Milano	A distributed constraint-based scheduler	Yes	[256]	1997	Artif. Intell. Eng.	15	1091	1345
Zhou97 Zhou97	J. Zhou	A Permutation-Based Approach for Solving the Job-Shop Problem	Yes	[462]	1997	Constraints An Int. J.	29	1168	1346
Wallace96 Wallace96	M. Wallace	Practical Applications of Constraint Programming	Yes	[434]	1996	Constraints An Int. J.	30	1155	1347
BeldiceanuC94 BeldiceanuC94	N. Beldiceanu, E. Contejean	Introducing Global Constraints in CHIP	Yes	[48]	1994	Mathematical and Computer Modelling	27	1033	1348
AggounB93 AggounB93	A. Aggoun, N. Beldiceanu	Extending CHIP in order to solve complex scheduling and placement problems	Yes	[5]	1993	Mathematical and Computer Modelling	17	1019	1349
Tay92 Tay92	David B. H. Tay	COPS: A Constraint Programming Approach to Resource-Limited Project Scheduling	No	[402]	1992	Comput. J.	null	No	1350
DincbasSH90 DincbasSH90	M. Dincbas, H. Simonis, Pascal Van Hentenryck	Solving Large Combinatorial Problems in Logic Programming	Yes	[121]	1990	J. Log. Program.	19	1050	1351

3.2 Extracted Concepts

Table 6: Automatically Extracted ARTICLE Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
AbohashimaEG21 [2]	14	scheduling, order, resource, setup-time, cmax, machine, transportation	parallel machine	cycle	Python	Gurobi			real-world, generated instance, github		877	1214
AbreuAPNM21 [108]	21	scheduling, completion-time, make-span, open-shop, order, setup-time, job, resource, task, machine, preempt, multi-agent, release-date, job-shop, distributed, cmax, tardiness, precedence, flow-shop	OSSP, single machine, Open Shop Scheduling Problem, parallel machine	noOverlap, cycle	Python, C++	OZ, Cplex	automotive, medical, patient	oil industry	generated instance, benchmark, real-world		878	1215
AbreuN22 [109]	20	preempt, make-span, transportation, order, tardiness, inventory, scheduling, flow-time, distributed, resource, completion-time, machine, setup-time, job, job-shop, task, flow-shop, open-shop, batch process, cmax	single machine, Open Shop Scheduling Problem, OSSP	noOverlap, cycle, cumulative	Python	OZ, Cplex	medical		real-world, benchmark		862	1199
AbreuNP23 [110]	20	scheduling, make-span, order, cmax, completion-time, machine, tardiness, job, earliness, setup-time, preempt, transportation, open-shop, distributed, job-shop, flow-shop, resource	parallel machine, Open Shop Scheduling Problem, OSSP	noOverlap	Python	Cplex, OPL	medical	oil industry	real-world, benchmark	time-tabling	846	1183
AggounB93 [5]	17	task, machine, precedence, order, job, activity, due-date, job-shop, flow-shop, resource, scheduling		circuit, bin-packing, disjunctive, cumulative	Prolog	OPL, CHIP	perfect-square, rectangle-packing		real-world		1012	1349
AkramNHRSA23 [7]	16	resource, completion-time, preempt, scheduling, order, machine, task, distributed		cycle, bin-packing	Python	OR-Tools	medical, agriculture		benchmark		847	1184
AlfieriGPS23 [9]	13	setup-time, order, tardiness, flow-shop, job, make-span, distributed, flow-time, completion-time, job-shop, resource, precedence, earliness, scheduling, machine, inventory, transportation	single machine, parallel machine		Java	Cplex	patient		benchmark		848	1185
ArtiguesR00 [18]	20	no preempt, machine, preempt, release-date, job-shop, transportation, cmax, lateness, precedence, scheduling, completion-time, re-scheduling, make-span, resource, order, setup-time, job, activity, earliness, due-date	RCPSP	cycle, cumulative, disjunctive		OZ					994	1331

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
AstrandJZ20 [23]	13	resource, open-shop, task, machine, precedence, flow-shop, job-shop, re-scheduling, make-span, order, setup-time, job, activity, scheduling, completion-time, due-date	parallel machine	alldifferent, disjunctive, cycle	C++	OZ, Gecode	robot	potash industry, mining industry, mineral industry	benchmark, real-world, real-life		890	1227
BadicaBI20 [24]	17	machine, activity, make-span, manpower, completion-time, resource, precedence, scheduling, distributed, task, order	psplib	bin-packing, cycle	Prolog	Gecode, ECLiPSe			real-world, benchmark		891	1228
BaptisteB18 [27]	10	resource, task, machine, preempt, manpower, lazy clause generation, precedence, scheduling, make-span, order, job	parallel machine, RCPSP, psplib	cumulative, bin-packing		CHIP				time-tabling, edge-finding, edge-finder	913	1250
BaptisteP00 [30]	21	resource, task, preempt, cmax, precedence, release-date, flow-shop, job-shop, scheduling, re-scheduling, make-span, order, job, activity, due-date	RCPSP	disjunctive, cumulative	C++	Claire, Ilog Scheduler, CHIP			benchmark	edge-finding, edge-finder, energetic reasoning	995	1332
BartakCS10 [36]	31	resource, setup-time, task, job-shop, scheduling, machine, activity, flow-shop, order, job, precedence	RCPSP	disjunctive	Prolog	SICStus			benchmark, real-life, real-world		963	1300
BartakS11 [37]	5	distributed, resource, scheduling, task, multi-agent, order		cumulative		OPL			random instance, real-world, real-life		951	1288
BartakSR10 [38]	31	scheduling, machine, preempt, activity, flow-shop, order, temporal constraint reasoning, completion-time, make-span, cmax, job, precedence, release-date, open-shop, distributed, tardiness, resource, task, lateness, job-shop, multi-agent, due-date	TCSP, single machine, Temporal Constraint Satisfaction Problem	cumulative, disjunctive		CPO, Choco Solver, OPL	robot		real-life, real-world	edge-finding, not-last, sweep, not-first	964	1301
BeckFW11 [43]	14	order, cmax, scheduling, resource, completion-time, machine, job, job-shop, precedence, preempt, make-span		disjunctive, table constraint, cumulative	C++	Ilog Scheduler			real-world, benchmark		952	1289
Bedhief21 [44]	7	setup-time, preempt, no preempt, sequence dependent setup, due-date, transportation, flow-shop, scheduling, make-span, completion-time, machine, job, order, release-date, tardiness	single machine, parallel machine	noOverlap		OZ, OPL, Cplex	robot, medical		real-life		879	1216
BegB13 [45]	23	scheduling, re-scheduling, machine, resource, task, completion-time, order, distributed	TMS	cycle			pipeline		benchmark		943	1280

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
BeldiceanuC94 [48]	27	order, completion-time, scheduling, machine, task, precedence, resource		circuit, cumulative, diffn, alldifferent, cycle, bin-packing	Prolog	CPO, OPL, CHIP, OZ	pipeline, car manufacturing		real-world, real-life, benchmark		1011	1348
BeldiceanuCDP11 [50]	24	cmax, preempt, resource, task, order, scheduling		diffn, geost, disjunctive, cumulative, bin-packing	Prolog	SICStus, CHIP	rectangle-packing, perfect-square		benchmark	edge-finding, sweep, energetic reasoning	953	1290
BelhadjiI98 [53]	9	precedence, release-date, job-shop, order, job, scheduling, resource, task, machine, preempt, due-date	Temporal Constraint Satisfaction Problem, TCSP, JSSP	disjunctive					real-life		1003	1340
BenediktMH20 [55]	19	preempt, order, job, re-scheduling, task, job-shop, scheduling, machine	single machine	noOverlap, endBeforeStart		Gurobi	robot		github, benchmark, random instance, generated instance		892	1229
BeniniLMR11 [58]	27	resource, order, activity, task, machine, preempt, release-date, tardiness, precedence, scheduling, re-scheduling, make-span	SCC, single machine	table constraint, cumulative, circuit		Ilog Scheduler, Cplex, OZ	pipeline		benchmark, real-world, instance generator		954	1291
BensanaLV99 [59]	7	order		cycle		Cplex, Ilog Solver	satellite, earth observation		benchmark		1002	1339
BocewiczBB09 [65]	19	job-shop, resource, multi-agent, precedence, scheduling, machine, transportation, order, tardiness, job, task, distributed, completion-time		cycle		OZ	robot			not-last	969	1306
Bonfietti16 [69]	13	order, activity, scheduling, resource, task, distributed, precedence		disjunctive, cumulative, circuit	C++	OZ	pipeline		benchmark		926	1263
BonfiettiLBM14 [72]	28	buffer-capacity, scheduling, order, job, resource, make-span, activity, distributed, machine, precedence, task, job-shop	RCPSP	circuit, cumulative, cycle		Ilog Solver	pipeline, hoist, robot, medical		real-world, generated instance, industrial instance, benchmark	time-tabling, sweep	939	1276
BorghesiBLMB18 [78]	13	job, re-scheduling, make-span, resource, distributed, activity, task, machine, scheduling, order		cumulative, cycle			super-computer		benchmark, real-life		914	1251
BourreauGGLT22 [81]	19	re-scheduling, scheduling, order, manpower, job, resource, precedence, transportation		disjunctive, alldifferent, diffn, cycle	C++	OZ, Choco Solver, Cplex, CHIP	crew-scheduling, nurse		real-world, benchmark		863	1200
BridiBLMB16 [83]	14	re-scheduling, make-span, job, scheduling, resource, order, machine, activity, distributed, tardiness		cycle, cumulative, circuit		OZ	medical, super-computer		real-world, real-life		927	1264
Caballero23 [87]	1	resource, scheduling	RCPSP								849	1186

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
CampeauG22 [88]	18	task, order, activity, make-span, completion-time, precedence, resource, job, scheduling	RCPSP, RCPSPDC	alwaysIn, noOverlap, endBeforeStart, cumulative, cycle	Python	Cplex, OZ		mining industry	real-life, real-world	edge-finding	864	1201
ColT22 [101]	19	no preempt, tardiness, task, order, transportation, due-date, flow-shop, completion-time, distributed, preempt, scheduling, precedence, make-span, machine, batch process, resource, job, open-shop, job-shop, lateness, setup-time	single machine, PMSP, Open Shop Scheduling Problem, FJS, JSSP, OSSP, parallel machine	alldifferent, cumulative, noOverlap, circuit, disjunctive	Java, C++	MiniZinc, CPO, OR-Tools, Cplex, OPL	robot, semiconductor, oven scheduling		generated instance, supplementary material, github, real-life, benchmark, real-world		865	1202
CzerniachowskaWZ23 [103	14	setup-time, transportation, flow-shop, machine, activity, order, completion-time, task, job, resource, job-shop, make-span, scheduling	PTC, JSSP, parallel machine	endBeforeStart, noOverlap		OPL, OZ, Cplex, CPO	automotive, robot	manufacturing industry, pharmaceutical industry, automotive industry	benchmark, Roadef, real-world		850	1187
Darby-DowmanLMZ97 [105]	20	machine, scheduling, order, task, make-span, resource	MGAP, single machine	span constraint, disjunctive	Prolog	Cplex, ECLiPSe	pipeline, aircraft		real-life, real-world, benchmark		1006	1343
DincbasSH90 [121]	19	task, machine, job-shop, distributed, precedence, scheduling, resource, order, job		circuit, disjunctive	Prolog	CHIP, OPL			real-life		1014	1351
DoulabiRP16 [124]	17	scheduling, resource, machine, distributed, transportation, order	single machine	cycle, bin-packing		OPL, Cplex	nurse, medical, patient, steel mill, rectangle-packing, crew-scheduling, robot		real-world, generated instance		928	1265
EscobetPQPRA19 [130]	10	task, job-shop, release-date, scheduling, order, batch process, job, resource, activity, distributed, machine, due-date		alternative constraint, noOverlap, circuit, cycle		OPL, Cplex	energy-price, dairy	food industry, manufacturing industry			903	1240
EvenSH15a [132]	16	preempt, distributed, transportation, resource, scheduling, completion-time, task, machine, order		disjunctive, cumulative	Java	Choco Solver, OPL	emergency service		real-world, real-life	sweep	931	1268
FahimiOQ18 [133]	22	completion-time, resource, job, precedence, batch process, lazy clause generation, open-shop, scheduling, distributed, setup-time, task, order, lateness, job-shop, due-date, machine, preempt, make-span, sequence dependent setup	RCPSP, psplib	cumulative, disjunctive, alldifferent		Choco Solver			benchmark, random instance	not-last, time-tabling, sweep, edge-finding, not-first	915	1252
FalaschiGMP97 [134]	27	order, scheduling			Prolog						1007	1344

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
FallahiAC20 [135]	18	order, resource, task, transportation, scheduling		cycle		OR-Tools, OZ	robot, nurse, medical, container terminal		github, real-life	sweep	893	1230
FanXG21 [136]	15	due-date, no preempt, preempt, tardiness, job, order, batch process, machine, task, earliness, completion-time, flow-shop, distributed, precedence, setup-time, resource, make-span, job-shop, scheduling, flow-time	single machine, parallel machine	cycle	Java, Python	OZ, ECLiPSe, Cplex, Gurobi	semiconductor	manufacturing industry	benchmark	max-flow	880	1217
FetgoD22 [139]	32	task, precedence, cmax, preempt, lazy clause generation, make-span, order, scheduling, resource, completion-time	CuSP, RCPSP	cumulative	Python, Java	OZ, CHIP, Choco Solver			benchmark, real-world	not-first, not-last, energetic reasoning, edge-finding, sweep, edge-finder, time-tabling	868	1205
GarridoAO09 [150]	30	re-scheduling, precedence, scheduling, make-span, resource, order, task		disjunctive	Java	CPO, OPL, Choco Solver			benchmark		970	1307
GarridoOS08 [151]	11	scheduling, make-span, resource, order, activity, task, machine			Java, C	Choco Solver, CPO			real-world		973	1310
GedikKEK18 [156]	11	cmax, resource, job, setup-time, due-date, scheduling, tardiness, task, order, machine, preempt, make-span, sequence dependent setup, completion-time, transportation	single machine, parallel machine, PMSP	cumulative, noOverlap		Cplex, OZ	nurse, medical	manufacturing industry	benchmark		916	1253
GoelSHFS15 [169]	12	precedence, resource, inventory, setup-time, scheduling, activity, task, order, transportation, machine		cumulative, noOverlap, disjunctive, alwaysIn		OPL, Cplex, CPO	pipeline				932	1269
GokgurHO18 [170]	17	setup-time, task, earliness, job-shop, due-date, scheduling, machine, preempt, activity, flow-shop, order, completion-time, transportation, make-span, cmax, job, precedence, release-date, tardiness, resource	single machine, parallel machine	alternative constraint, cumulative, disjunctive		OZ, OPL, CHIP	robot, semiconductor		real-life, real-world	not-first, edge-finding, energetic reasoning, not-last	917	1254
GrimesIOS14 [177]	16	completion-time, due-date, resource, task, machine, preempt, distributed, re-scheduling, order, activity, scheduling		disjunctive		Cplex, CHIP	energy-price, real-time pricing, HVAC		real-world, real-life		940	1277
GurEA19 [468]	24	order, distributed, resource, job-shop, scheduling, re-scheduling, job, completion-time				OZ, Cplex	patient, medical		real-life		904	1241

Table 6: Automatically Extracted ARTICLE Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
GurPAE23 [182]	25	re-scheduling, order, scheduling, distributed, resource, inventory, machine		cumulative		OPL, Cplex, OZ	physician, patient, COVID, nurse		real-life		851	1188
HachemiGR11 [183]	16	task, precedence, job-shop, transportation, make-span, scheduling, resource, order, job, activity		cycle, alldifferent		OPL, Ilog Scheduler, Cplex	crew-scheduling, forestry	food industry			955	1292
Ham18 [184]	14	cmax, precedence, batch process, resource, completion-time, make-span, scheduling, machine, inventory, transportation, job-shop, job, distributed, sequence dependent setup, due-date, task, order	parallel machine	cumulative, noOverlap, endBeforeStart, disjunctive, cycle		Cplex, OPL	drone, robot, aircraft, semiconductor				918	1255
HamPK21 [185]	12	distributed, precedence, cmax, setup-time, resource, make-span, job-shop, scheduling, sequence dependent setup, tardiness, re-scheduling, order, machine, task, job, completion-time, flow-shop	parallel machine, single machine, FJS	noOverlap, endBeforeStart, cycle		OPL, Cplex	robot, agriculture, semiconductor		benchmark, github		881	1218
HeinzNVH22 [196]	16	activity, make-span, job, precedence, re-scheduling, distributed, resource, setup-time, scheduling, preempt, sequence dependent setup, flow-shop, task, order, completion-time, machine	parallel machine	cumulative, noOverlap, alternative constraint		Gurobi	robot, crew-scheduling		real-world, generated instance, benchmark, gitlab		869	1206
HeinzSB13 [195]	36	preempt, due-date, resource, scheduling, precedence, order, completion-time, machine, job, release-date	RCPSP, single machine, psplib	disjunctive, cumulative		MiniZinc, Cplex	satellite		benchmark	time-tabling, edge-finding	944	1281
HeinzSSW12 [193]	12	inventory, task, order		bin-packing		Cplex	steel mill	steel industry, process industry	real-world, CSPlib		946	1283
HeipckeCCS00 [198]	8	make-span, release-date, resource, activity, precedence, completion-time, job-shop, due-date, preempt, scheduling, order, machine, job, task	single machine, RCPSP	disjunctive, cumulative					benchmark, instance generator		996	1333
Hooker05 [205]	17	machine, job, task, precedence, release-date, due-date, make-span, order, tardiness, scheduling, distributed, resource		cumulative, circuit, disjunctive		Cplex, OPL, Ilog Scheduler			random instance	edge-finding	983	1320
Hooker06 [207]	19	machine, job, task, precedence, release-date, due-date, make-span, order, tardiness, scheduling, resource		cumulative, circuit, disjunctive		Cplex, OPL, Ilog Scheduler			random instance		979	1316
HubnerGSV21 [211]	22	completion-time, resource, order, job, inventory, activity, due-date, task, machine, preempt, transportation, cmax, tardiness, make-span, precedence, scheduling	RCPSPDC, RCPSP	cycle, cumulative, endBeforeStart, alternative constraint	C	Gurobi, Cplex, OPL	automotive		benchmark, real-life		882	1219

Table 6: Automatically Extracted ARTICLE Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
IsikYA23 [213]	28	tardiness, scheduling, machine, distributed, job, resource, completion-time, flow-shop, batch process, setup-time, job-shop, release-date, due-date, task, precedence, transportation, earliness, order, cmax, sequence dependent setup, preempt, make-span	parallel machine, single machine	circuit, noOverlap, cumulative, endBeforeStart		OPL, Cplex, OZ	medical, robot	steel industry	real-world, benchmark, generated instance, real-life	energetic reasoning	852	1189
Kameugne15 [220]	2	resource, scheduling, task, preempt, completion-time		cumulative						not-last, edge-finding, not-first	933	1270
KameugneFSN14 [224]	27	job-shop, release-date, resource, precedence, job, order, preempt, scheduling, make-span, completion-time, task	RCPSP, psplib, CuSP	disjunctive, cumulative		CHIP, Gecode			random instance, benchmark	energetic reasoning, edge-finding, not-last, not-first, edge-finder, time-tabling	941	1278
KelbelH11 [227]	10	release-date, inventory, earliness, due-date, preempt, job-shop, resource, scheduling, make-span, distributed, task, precedence, order, completion-time, machine, tardiness, job	JSSP	cumulative, disjunctive		Ilog Solver, OPL, Cplex			benchmark, random instance, generated instance	edge-finder, edge-finding	956	1293
KhayatLR06 [229]	15	job-shop, due-date, scheduling, preempt, task, order, machine, activity, make-span, cmax, job, precedence, resource, setup-time				OPL, Cplex			real-life, benchmark		980	1317
KoehlerBFFHPSSS21 [234	51	flow-shop, scheduling, lateness, job, task, make-span, machine, tardiness, precedence, resource, job-shop, flow-time, order	CTW, single machine	cycle, circuit, cumulative, disjunctive, alldifferent	C , Python	Z3, MiniZinc, OPL, Cplex, Gurobi, OR-Tools, Chuffed	cable tree, automotive, robot		real-world, benchmark, github		883	1220
KorbaaYG00 [236]	10										997	1334
KovacsB08 [238]	7	order, tardiness, job, activity, preempt, release-date, resource, scheduling, completion-time, machine	single machine	bin-packing, disjunctive, cumulative, cycle		Ilog Scheduler, Ilog Solver	aircraft		benchmark	sweep	974	1311
KovacsB11 [239]	24	flow-time, precedence, order, tardiness, job, activity, preempt, release-date, earliness, distributed, due-date, job-shop, flow-shop, resource, scheduling, make-span, completion-time, machine	parallel machine, single machine	disjunctive, cumulative, cycle	C++	Ilog Scheduler, Ilog Solver			benchmark	edge-finding	957	1294

Table 6: Automatically Extracted ARTICLE Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
KovacsK11 [241]	24	tardiness, job, release-date, earliness, sequence dependent setup, due-date, job-shop, transportation, flow-shop, resource, scheduling, completion-time, task, machine, order	single machine	cycle	C++	Ilog Solver, Gecode, Cplex					958	1295
KreterSS17 [246]	31	scheduling, task, order, machine, preempt, activity, make-span, completion-time, precedence, resource, lazy clause generation	RCPSP, parallel machine	cycle, alwaysIn, cumulative, diffn		CPO, Cplex, MiniZinc, CHIP, Chuffed			benchmark	edge-finding	924	1261
KuchcinskiW03 [247]	15	scheduling, precedence, resource, distributed, order		cycle, circuit	Java		pipeline		benchmark		987	1324
LaborieRSV18 [252]	41	release-date, job-shop, resource, activity, precedence, sequence dependent setup, earliness, scheduling, machine, inventory, transportation, manpower, due-date, setup-time, batch process, order, tardiness, flow-shop, job, make-span, re-scheduling, task, distributed	psplib, parallel machine, RCPSP	alternative constraint, cumulative, noOverlap, disjunctive, span constraint, cycle, alwaysIn, endBeforeStart	C , Python, C++, Java	CHIP, Gecode, Ilog Solver, Cplex, Ilog Scheduler, OPL, Choco Solver, CPO	semiconductor, railway, container terminal, satellite, robot, pipeline, aircraft, shipping line	chemical industry, petrochemical industry	real-world, CSPlib, benchmark	edge-finding	919	1256
LacknerMMWW23 [254]	42	release-date, batch process, setup-time, job, order, due-date, tardiness, scheduling, make-span, machine, task, lateness, job-shop, earliness	parallel machine, OSP, single machine	alternative constraint, disjunctive, bin-packing, noOverlap, cumulative, endBeforeStart		Chuffed, Cplex, OPL, CPO, OR-Tools, MiniZinc, Gurobi	semiconductor, oven scheduling	electronics industry, steel industry, manufacturing industry	random instance, industrial partner, benchmark, instance generator, zenodo, real-life	time-tabling	853	1190
LammaMM97 [256]	15	job-shop, resource, scheduling, precedence, order, task, job, distributed		circuit, disjunctive	C++, Prolog	ECLiPSe, OPL, CHIP	railway		real-life		1008	1345
LetortCB15 [261]	52	machine, make-span, job, precedence, resource, scheduling, task, order	psplib	cumulative, cycle, bin-packing	Java, Prolog	Choco Solver CHIP, SICStus			generated instance, Roadef, benchmark, random instance	energetic reasoning, sweep, edge-finding	934	1271
LiessM08 [263]	12	preempt, resource, scheduling, machine, job, activity, precedence, job-shop, task, make-span, order, cmax	RCPSP, psplib	disjunctive, cumulative	C++	OZ			benchmark	edge-finding	975	1312
LimtanyakulS12 [268]	32	release-date, scheduling, order, completion-time, job, resource, activity, tardiness, machine, due-date, precedence		table constraint, disjunctive, bin-packing, cumulative		OZ, Ilog Scheduler, Cplex	robot, automotive	automotive industry	random instance, real-life, generated instance, industrial partner, benchmark	not-last, energetic reasoning, not-first, edge-finding	947	1284
LombardiM10a [275]	30	due-date, distributed, order, job, make-span, release-date, re-scheduling, task, completion-time, resource, activity, precedence, preempt, scheduling, machine	TCSP	cycle, span constraint, cumulative, disjunctive, table constraint	C	Cplex			real-world, benchmark, real-life	sweep	965	1302

Table 6: Automatically Extracted ARTICLE Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
LombardiM12 [278]	35	precedence, flow-shop, job-shop, transportation, completion-time, re-scheduling, make-span, sequence dependent setup, order, setup-time, job, activity, earliness, scheduling, due-date, resource, task, machine, inventory, preempt, distributed, manpower, lazy clause generation, tardiness	parallel machine, RCPSP, psplib	cycle, disjunctive, cumulative, circuit		OZ, OR-Tools	aircraft	chemical industry	real-world, benchmark	energetic reasoning, edge-finding	948	1285
LombardiM12a [277]	10	order, make-span, completion-time, resource, activity, precedence, producer/consumer, scheduling	psplib, RCPSP	disjunctive		Ilog Solver			benchmark		949	1286
LopesCSM10 [280]	39	distributed, stock level, resource, inventory, job-shop, due-date, scheduling, activity, task, order, transportation, make-span, job, precedence, re-scheduling		disjunctive, table constraint, cycle, alldifferent	C++	Ilog Scheduler, Ilog Solver, OZ, OPL	pipeline	oil industry	benchmark, real-world	max-flow	966	1303
LopezAKYG00 [281]	4										998	1335
LorigeonBB02 [282]	8	setup-time, preempt, scheduling, machine, order, flow-shop, job, cmax, make-span, open-shop, completion-time, resource, activity	parallel machine, Open Shop Scheduling Problem			OZ, Cplex, OPL					989	1326
LunardiBLRV20 [283]	20	scheduling, due-date, make-span, machine, completion-time, job-shop, flow-shop, resource, precedence, setup-time, activity, re-scheduling, job, order, tardiness, preempt	FJS	endBeforeStart, noOverlap	Python	Cplex			benchmark, random instance, generated instance, github		894	1231
MalikMB08 [291]	18	distributed, resource, scheduling, machine, precedence, order		cycle			pipeline		benchmark	edge-finding	976	1313
MartinPY01 [293]	17	scheduling, task, order, machine, transportation, re-scheduling, resource		circuit	Prolog	ECLiPSe, Ilog Solver	railway, aircraft		real-life		992	1329
Mason01 [294]	38	scheduling, order, task, activity, transportation				OPL, OZ, Cplex	railway, crew-scheduling, nurse				993	1330
MejiaY20 [296]	13	resource, completion-time, machine, setup-time, job, job-shop, open-shop, cmax, sequence dependent setup, release-date, preempt, due-date, re-scheduling, make-span, transportation, multi-agent, order, tardiness, scheduling, distributed	Open Shop Scheduling Problem, OSSP, parallel machine	disjunctive	Java	Cplex, ECLiPSe	agriculture, robot		supplementary material, benchmark, generated instance		895	1232

Table 6: Automatically Extracted ARTICLE Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
MengZRZL20 [298]	13	earliness, job-shop, scheduling, machine, preempt, sequence dependent setup, flow-time, flow-shop, order, completion-time, transportation, make-span, cmax, job, precedence, batch process, open-shop, distributed, tardiness, resource, no preempt, setup-time, task	Open Shop Scheduling Problem, OSP, parallel machine, FJS	alternative constraint, noOverlap, endBeforeStart		OPL, Gecode, Gurobi, OR-Tools, Cplex	robot, semi-conductor		supplementary material, benchmark		896	1233
MokhtarzadehTNF20 [301]	14	task, make-span, multi-agent, setup-time, distributed, manpower, precedence, resource, completion-time, machine, scheduling, order, job	parallel machine	alldifferent, cycle, circuit		Cplex	robot, crew-scheduling		generated instance, real-world	time-tabling	897	1234
MontemanniD23 [305]	13	resource, distributed, order, scheduling, machine, task		circuit	Python	OPL, OR-Tools, Gurobi	robot, drone		benchmark, supplementary material		854	1191
MontemanniD23a [304]	20	order, completion-time, task, transportation, scheduling		circuit	Python	OR-Tools	drone		benchmark		855	1192
MullerMKP22 [309]	18	precedence, job-shop, batch process, scheduling, completion-time, make-span, order, setup-time, job, activity, due-date, resource, task, machine, preempt, cmax	FJS	disjunctive, circuit	Java, Python	Chuffed, MiniZinc, OZ, Gecode, Choco Solver, OPL, Cplex, OR-Tools	robot, semi-conductor		benchmark, random instance, real-world, github		870	1207
NaderiRR23 [313]	27	preempt, sequence dependent setup, flow-shop, task, order, earliness, transportation, machine, make-span, cmax, completion-time, job, precedence, re-scheduling, distributed, resource, setup-time, job-shop, open-shop, due-date, scheduling, tardiness	RCPSP, FJS, OSP, Open Shop Scheduling Problem, PMSP, PTC, single machine, parallel machine	cumulative, noOverlap, endBeforeStart, disjunctive, alternative constraint	Python	CPO, OZ, Z3, Gurobi, Cplex	crew-scheduling, automotive		github, benchmark		856	1193
NattafAL15 [314]	21	resource, release-date, due-date, scheduling, preempt, task, order, activity, make-span	CECSP, CuSP, RCPSP	cumulative	C++	Cplex			generated instance	sweep, energetic reasoning	935	1272
NattafAL17 [315]	18	resource, release-date, scheduling, task, order, activity, make-span, job	CECSP	disjunctive, cumulative	C++	Cplex			real-world	edge-finding, energetic reasoning	925	1262
NishikawaSTT19 [320]	16	re-scheduling, make-span, order, preempt, resource, activity, task, distributed, machine, precedence, scheduling	parallel machine	cumulative, alternative constraint		Cplex, OZ	pipeline, robot		real-world, benchmark		905	1242

Table 6: Automatically Extracted ARTICLE Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
NovaraNH16 [321]	17	earliness, machine, make-span, job, precedence, batch process, re-scheduling, tardiness, resource, setup-time, due-date, scheduling, activity, sequence dependent setup, manpower, task, order, completion-time		cumulative, noOverlap, endBeforeStart, disjunctive, alternative constraint		OPL, Cplex		pharmaceutical industry	CSPlib, benchmark		929	1266
Novas19 [322]	13	inventory, lateness, setup-time, resource, make-span, scheduling, flow-shop, transportation, flow-time, precedence, cmax, release-date, job-shop, sequence dependent setup, due-date, machine, task, tardiness, job, completion-time, activity, order, distributed	parallel machine, FJS	cycle, cumulative, noOverlap, endBeforeStart		OPL, OZ, Cplex	medical, semiconductor, robot		benchmark		906	1243
NovasH10 [323]	20	precedence, batch process, due-date, re-scheduling, make-span, earliness, order, tardiness, scheduling, resource, completion-time, machine, setup-time, lateness, job, task, manpower, activity				OZ, OPL, Ilog Scheduler	pipeline				967	1304
NovasH12 [324]	17	precedence, make-span, transportation, order, scheduling, resource, completion-time, machine, job, task, activity		cycle		Ilog Solver, OZ, OPL, Ilog Scheduler	semiconductor robot, hoist, electroplating, container terminal				950	1287
NovasH14 [325]	14	precedence, make-span, transportation, order, scheduling, buffer-capacity, resource, completion-time, machine, job, job-shop, task, activity	parallel machine, single machine			Ilog Solver, OPL, Ilog Scheduler	robot		benchmark		942	1279
NuijtenP98 [327]	16	resource, setup-time, job-shop, scheduling, preempt, manpower, flow-shop, task, order, completion-time, transportation, machine, make-span, job, precedence	JSSP, single machine	disjunctive	C++	Ilog Solver, Ilog Scheduler, OPL	satellite		real-life	edge-finding	1004	1341
OzturkTHO13 [333]	36	order, setup-time, job, activity, scheduling, completion-time, resource, task, machine, preempt, cmax, precedence, flow-shop, make-span	SBSFMMAL	cycle, disjunctive, cumulative		OPL, Cplex, CHIP, Ilog Solver, OZ			real-world, real-life	edge-finding	945	1282
PandeyS21a [334]	29	make-span, re-scheduling, job, precedence, distributed, resource, task, scheduling, machine, activity, flow-shop, order, completion-time	single machine, parallel machine, PMSP	cumulative, endBeforeStart, alternative constraint		OPL, Cplex, OZ	semiconductor		benchmark		884	1221

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Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
PapaB98 [336]	25	due-date, preempt, machine, re-scheduling, job, activity, order, task, make-span, completion-time, scheduling, flow-shop, distributed, cmax, setup-time, resource, job-shop	PJSSP, JSSP	cumulative, table constraint, disjunctive	C++	Ilog Solver, CHIP, Claire	hoist		benchmark	edge-finder, energetic reasoning, edge-finding	1005	1342
PoderBS04 [344]	16	preempt, due-date, resource, scheduling, precedence, order, task, machine, activity, producer/consumer, release-date	RCPSP	cumulative	Prolog	CHIP		chemical industry			986	1323
PohlAK22 [345]	16	resource, activity, completion-time, setup-time, lateness, release-date, precedence, transportation, earliness, order, sequence dependent setup, re-scheduling, tardiness, inventory, scheduling, machine, job	SCC, single machine	noOverlap, cumulative	Python	Gurobi, Cplex, OZ	aircraft		benchmark, real-world		871	1208
Polo-MejiaALB20 [346]	18	cmax, resource, preempt, precedence, earliness, tardiness, task, due-date, job, order, activity, release-date, make-span, machine, scheduling, completion-time, setup-time	RCPSP	alternative constraint, alwaysIn, cumulative, noOverlap, disjunctive, endBeforeStart	C++	Cplex, CPO			Roadef, github		898	1235
PourDERB18 [348]	12	scheduling, task, order, machine, transportation, job				Cplex, OR-Tools	crew-scheduling, railway		real-life, benchmark, real-world, generated instance		920	1257
PrataAN23 [352]	17	machine, tardiness, job, lateness, activity, re-scheduling, flow-time, setup-time, release-date, inventory, earliness, sequence dependent setup, distributed, due-date, preempt, job-shop, batch process, flow-shop, resource, scheduling, make-span, open-shop, completion-time, task, precedence, order	single machine, parallel machine, Open Shop Scheduling Problem	circuit, cumulative		OZ, CHIP	robot, aircraft, energy-price, dairy	manufacturing industry	benchmark, real-world, real-life	time-tabling	844	1181
QinDCS20 [355]	18	transportation, order, cmax, tardiness, scheduling, resource, completion-time, machine, setup-time, job, task, activity, precedence, make-span	parallel machine	endBeforeStart, cycle, noOverlap		Cplex, OPL	yard crane, shipping line, container terminal		real-life, benchmark		899	1236
QinWSLS21 [354]	12	preempt, job-shop, flow-shop, batch process, scheduling, make-span, order, cmax, completion-time, machine, tardiness, job, lateness	single machine		C++	OZ, OPL, Cplex	agriculture, semiconductor				885	1222
Rodriguez07 [362]	15	precedence, job-shop, transportation, job, scheduling, resource, order, task, preempt, activity, due-date		disjunctive, circuit		Ilog Solver, Ilog Scheduler, Cplex, Z3	railway, satellite		real-life		977	1314

Table 6: Automatically Extracted ARTICLE Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
RodriguezDG02 [361]	10	completion-time, scheduling, resource, transportation, activity, order		circuit, disjunctive			railway			edge-finding	990	1327
RuggieroBBMA09 [364]	14	scheduling, order, resource, activity, preempt, setup-time, distributed, machine, precedence, task		circuit, cumulative, cycle		OZ, Ilog Solver, Ilog Scheduler, Cplex	pipeline, satellite		instance generator, real-life		971	1308
SacramentoSP20 [365]	33	preempt, distributed, machine, precedence, task, flow-shop, job-shop, open-shop, transportation, scheduling, order, completion-time, job, resource, make-span, activity	parallel machine, Open Shop Scheduling Problem	disjunctive, cumulative, alternative constraint, endBeforeStart, noOverlap	Java	Cplex, OZ, CPO	container terminal		benchmark, real-life, zenodo, real-world		900	1237
SadykovW06 [367]	9	scheduling, lateness, due-date, machine, completion-time, job, release-date	single machine, parallel machine	disjunctive		CHIP	robot		generated instance		981	1318
SakkoutW00 [368]	30	scheduling, distributed, task, order, job-shop, machine, preempt, activity, precedence, transportation, re-scheduling, resource, job	KRFP, single machine	bin-packing, disjunctive		CHIP, Cplex	emergency service, aircraft		benchmark, real-world	edge-finding, edge-finder	999	1336
SchausHMCMD11 [369]	23	order, task	SCC	bin-packing			steel mill	steel industry	benchmark, CSPlib, generated instance		959	1296
SchildW00 [370]	23	distributed, job-shop, flow-shop, resource, scheduling, completion-time, task, machine, precedence, order, job	single machine	disjunctive, cycle, bin-packing		OZ, Ilog Solver	automotive	automotive industry, aerospace industry		time-tabling, edge-finding	1000	1337
SchuttFSW11 [375]	33	scheduling, completion-time, resource, open-shop, order, task, machine, preempt, activity, lazy clause generation, precedence, make-span	psplib, RCPSP	disjunctive, cumulative, circuit, span constraint		Ilog Scheduler, ECLiPSe, CHIP, SICStus, OZ			benchmark, real-world	not-last, not-first, edge-finding, edge-finder	960	1297
ShaikhK23 [379]	12	order, job, activity, re-scheduling, distributed, job-shop, resource, scheduling, open-shop, task, machine					medical, drone		benchmark, real-world	time-tabling	857	1194
ShinBBHO18 [381]	16	scheduling, task, order, machine, preempt, activity, transportation, resource, inventory, job					patient, physician, medical, nurse		github, real-world		921	1258
Siala15 [382]	2	resource, scheduling		disjunctive					benchmark		936	1273
SimoninAHL15 [385]	23	resource, activity, precedence, preempt, scheduling, order, inventory, transportation, task, make-span		disjunctive, span constraint, cumulative, cycle		CHIP	earth observation, satellite, pipeline, robot			sweep	937	1274

Table 6: Automatically Extracted ARTICLE Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
Simonis07 [387]	30	due-date, job-shop, batch process, transportation, resource, scheduling, make to order, task, machine, producer/consumer, order, bill of material, job, activity, re-scheduling, setup-time, release-date, sequence dependent setup		disjunctive, cumulative, alldifferent, cycle, diffn, bin-packing	Prolog	OZ, OPL, CHIP, Ilog Scheduler	aircraft, patient, nurse, medical			time-tabling, sweep, bi-partite matching	978	1315
SourdN00 [389]	12	make-span, order, scheduling, resource, completion-time, machine, setup-time, job, job-shop, flow-shop, precedence, open-shop, cmax, release-date, preempt	single machine, JSSP	disjunctive, cumulative		Ilog Scheduler	robot		real-life, benchmark	edge-finding, not-first	1001	1338
SubulanC22 [391]	38	scheduling, tardiness, task, order, due-date, machine, preempt, activity, make-span, BOM, completion-time, precedence, transportation, resource, inventory	RCPSP	endBeforeStart, cumulative		Cplex, OZ, OPL	offshore		real-life, benchmark, real-world		873	1210
SureshMOK06 [394]	19	distributed, scheduling, buffer-capacity, order, job, task, machine		cumulative, cycle		Z3, OZ					982	1319
TangLWSK18 [398]	28	scheduling, task, order, preempt, activity, job, transportation, re-scheduling, resource	RCPSP	cycle, circuit	C	Cplex, OZ, OPL	crew-scheduling, railway, pipeline				922	1259
Timpe02 [407]	18	due-date, order, machine, inventory, task, job, activity, stock level, setup-time, resource, make-span, scheduling, producer/consumer		cumulative, disjunctive, diffn, cycle	C++	CHIP, Cplex		chemical industry, process industry			991	1328
TopalogluO11 [409]	10	order, re-scheduling, task, distributed, transportation, preempt, scheduling				Cplex, OPL, OZ, Ilog Solver	nurse, medical, physician, emergency service, patient		real-life	time-tabling	961	1298
TrojetHL11 [412]	7	order, job-shop, machine, activity, make-span, completion-time, job, precedence, distributed, resource, due-date, scheduling, task	RCPSP	cumulative, diffn, disjunctive, cycle, alldifferent	Prolog	OZ, CHIP, SICStus	robot		real-world		962	1299
Tsang03 [413]	2	resource, scheduling							real-life	time-tabling	988	1325
VilimBC05 [429]	23	setup-time, sequence dependent setup, distributed, job-shop, batch process, resource, scheduling, make-span, open-shop, completion-time, task, machine, precedence, order, job, activity		disjunctive, cumulative, cycle					benchmark, real-life	not-first, sweep, edge-finding, not-last	984	1321

Table 6: Automatically Extracted ARTICLE Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
VlkHT21 [432]	14	tardiness, due-date, completion-time, order, distributed, precedence, resource, scheduling	PMSP	alternative constraint, noOverlap		OPL, Cplex, Gurobi, Z3	automotive, robot		industrial partner, random instance, github, benchmark		886	1223
Wallace96 [434]	30	job-shop, transportation, distributed, task, resource, scheduling, multi-agent, order, machine, job, activity		circuit, disjunctive, cycle	Prolog, Lisp	CHIP, Ilog Solver, ECLiPSe, OZ, OPL	automotive, aircraft, railway, robot	process industry, automotive industry		time-tabling	1010	1347
WallaceY20 [435]	19	scheduling, machine, flow-shop, order, transportation, job, lazy clause generation, resource, task, job-shop	CHSP	circuit, cumulative, disjunctive, cycle		Chuffed, OPL, Gecode, Gurobi, Cplex, MiniZinc	robot, hoist, electroplating, yard crane, container terminal		random instance, real-life, real-world, benchmark	edge-finding, time-tabling	901	1238
WangMD15 [438]	13	make-span, scheduling, job, resource, activity, completion-time, job-shop, task, precedence, order, cmax, re-scheduling		noOverlap, cumulative		OPL, Cplex, OZ	nurse, medical, physician, patient		real-life, real-world	time-tabling	938	1275
WikarekS19 [441]	22	multi-agent, scheduling, machine, preempt, manpower, flow-shop, order, make-span, cmax, resource, inventory, job, precedence, distributed, setup-time, task, job-shop	JSSP, RCPSP	cumulative, disjunctive		OZ, Z3, ECLiPSe	robot				907	1244
YounespourAKE19 [448]	11	precedence, re-scheduling, resource, inventory, order, scheduling, completion-time, cmax, activity, make-span, distributed, machine		noOverlap, alternative constraint, span constraint, cumulative		OPL, Z3	nurse, medical, patient		real-life, real-world		908	1245
YunusogluY22 [450]	18	due-date, batch process, order, tardiness, job, cmax, make-span, release-date, re-scheduling, lateness, flow-time, precedence, completion-time, sequence dependent setup, job-shop, resource, activity, setup-time, earliness, preempt, scheduling, machine, inventory, transportation	PMSP, parallel machine	noOverlap, bin-packing, endBeforeStart, cumulative		Cplex, OPL, OZ	robot, medical		real-world, benchmark, generated instance, real-life, supplementary material		874	1211
YuraszeckMCCR23 [453]	11	setup-time, cmax, activity, make-span, machine, open-shop, precedence, resource, preempt, batch process, task, flow-shop, order, scheduling, job, job-shop, flow-time	RCPSP, Open Shop Scheduling Problem, JSSP, FJS, OSSP	endBeforeStart, cumulative		OPL, Cplex		pharmaceutical industry	github, real-world, benchmark		858	1195
YuraszeckMPV22 [452]	26	completion-time, sequence dependent setup, resource, setup-time, task, distributed, open-shop, machine, due-date, transportation, flow-shop, flow-time, job-shop, scheduling, order, job, re-scheduling, make-span, release-date	Open Shop Scheduling Problem, OSSP, single machine, JSSP	noOverlap, disjunctive	Java	Cplex	semiconductor, automotive, robot	manufacturing industry	generated instance, github, benchmark, real-life		875	1212

Table 6: Automatically Extracted ARTICLE Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
ZarandiKS16 [454]	17	make-span, job, scheduling, completion-time, resource, order, task, machine, preempt, earliness, distributed, due-date, tardiness, flow-shop, job-shop, transportation	single machine			Ilog Solver	robot		real-world	time-tabling	930	1267
ZeballosH05 [455]	10	transportation, scheduling, buffer-capacity, completion-time, make-span, order, job, activity, due-date, resource, task, machine, tardiness, precedence				Ilog Scheduler, OPL, Ilog Solver	robot				985	1322
ZeballosQH10 [456]	20	cmax, make-span, resource, activity, precedence, completion-time, earliness, job-shop, transportation, due-date, preempt, scheduling, order, machine, tardiness, job, task				ECLiPSe, Ilog Solver, OZ, Cplex, Ilog Scheduler, OPL	robot		benchmark, real-world		968	1305
ZhangW18 [459]	18	job, completion-time, flow-shop, precedence, lateness, job-shop, re-scheduling, transportation, multi-agent, earliness, order, preempt, flow-time, make-span, distributed, resource, tardiness, scheduling, machine, setup-time	FJS	noOverlap, cumulative		Cplex, Z3, OPL	robot		benchmark		923	1260
ZhangYW21 [458]	10	cmax, task, machine, job, activity, re-scheduling, release-date, setup-time, preempt, distributed, job-shop, batch process, resource, scheduling, multi-agent, make-span, precedence, order	RCPSP	endBeforeStart, disjunctive		Cplex	robot		benchmark		887	1224
Zhou97 [462]	29	release-date, job-shop, due-date, task, order, preempt, scheduling, precedence, completion-time, job, machine		cumulative, disjunctive	Prolog	CHIP, Ilog Scheduler, Z3			benchmark	edge-finding, edge-finder	1009	1346
ZouZ20 [467]	10	resource, activity, task, order, scheduling, precedence, completion-time, distributed		cumulative, endBeforeStart, noOverlap, span constraint		Cplex, OPL	pipeline		benchmark		902	1239
abs-0907-0939 [342]	12	resource, order, activity, due-date, preempt, scheduling, make-span, release-date, task		cumulative	Java	Choco Solver, CHIP			real-world	sweep, energetic reasoning, edge-finding	972	1309
abs-1901-07914 [47]	8	multi-agent, scheduling, order, resource, make-span, distributed, machine, task			Python	OZ, MiniZinc, OR-Tools	robot		benchmark, real-world, github		909	1246
abs-1902-01193 [8]	9	order, resource, activity, BOM, task, scheduling			C++, Prolog, Python	Ilog Solver, CHIP, OPL	medical, nurse			time-tabling	910	1247

Table 6: Automatically Extracted ARTICLE Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
abs-1902-09244 [187]	62	order, tardiness, completion-time, resource, setup-time, activity, inventory, task, machine, due-date, precedence, transportation, earliness, flow-shop, job-shop, scheduling, job, make-span, release-date	FJS, RCPSP	cumulative, endBeforeStart, cycle		Cplex, OZ, OPL	aircraft	steel industry, food-processing industry	benchmark, industry partner, real-world		911	1248
abs-1911-04766 [158]	16	release-date, scheduling, order, completion-time, job, re-scheduling, resource, make-span, activity, due-date, precedence, task	RCPSP	noOverlap, disjunctive, cumulative, alternative constraint, endBeforeStart	Java	OZ, MiniZinc, CPO, Chuffed, Gecode, Cplex	automotive		real-world, generated instance, industrial partner, github, benchmark, instance generator, real-life	time-tabling	912	1249
abs-2102-08778 [99]	10	open-shop, machine, task, flow-shop, job-shop, scheduling, order, job, resource, make-span	JSSP		Java	OR-Tools, Cplex, OPL, MiniZinc, CPO			generated instance, benchmark, real-life, real-world		888	1225
abs-2211-14492 [392]	17	resource, setup-time, distributed, activity, due-date, precedence, task, flow-shop, machine, transportation, job-shop, scheduling, order, job, make-span, tardiness, completion-time, cmax	single machine	bin-packing, cumulative, disjunctive	Python	Cplex, OR-Tools, OZ	semiconductor		benchmark, random instance, generated instance		876	1213
abs-2305-19888 [197]	42	scheduling, order, job, re-scheduling, make-span, completion-time, cmax, sequence dependent setup, preempt, resource, setup-time, distributed, activity, precedence, task, flow-shop, machine	parallel machine	noOverlap, cumulative, alternative constraint		Gurobi	robot		real-world, generated instance, gitlab, benchmark		859	1196
abs-2306-05747 [401]	9	job-shop, re-scheduling, flow-time, scheduling, order, completion-time, job, resource, make-span, tardiness, preempt, machine, precedence, task, flow-shop	JSSP	noOverlap, disjunctive, cumulative	Java	Choco Solver			real-world, supplementary material, github, industrial instance, benchmark		860	1197
abs-2312-13682 [340]	20	re-scheduling, scheduling, order, resource, make-span, activity, machine, transportation, inventory, task		cumulative, table constraint		OPL	steel mill, container terminal, nurse		real-world, generated instance		861	1198
abs-2402-00459 [317]	21	machine, due-date, earliness, job-shop, scheduling, order, job, multi-agent, tardiness, completion-time, resource, precedence, task	single machine	disjunctive, bin-packing, cumulative		OPL, OR-Tools		mining industry	instance generator, real-world, generated instance, github, benchmark		845	1182

3.3 Manually Defined Fields

Table 7: Manually Defined ARTICLE Properties

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
PrataAN23 PrataAN23 [352]	Applications of constraint programming in production scheduling problems: A descriptive bibliometric analysis	-	benchmark, real-world, real-life	1	-		-	-	survey	-	844	1128
abs-2402-00459 abs-2402-00459 [317]	Genetic-based Constraint Programming for Resource Constrained Job Scheduling	OR-Tools	instance generator, real-world, generated instance, github, benchmark	2	y		n	-	RCJS	cumulatives	845	1180
AbreuNP23 AbreuNP23 [110]	A new two-stage constraint programming approach for open shop scheduling problem with machine blocking	?	real-world, benchmark	10	?		?	?	?	?	846	1018
AkramNHRSA23 AkramNHRSA23 [7]	Joint Scheduling and Routing Optimization for Deterministic Hybrid Traffic in Time-Sensitive Networks Using Constraint Programming	OR-Tools	benchmark	0	n		n	-	TSN	-	847	1020
AlfieriGPS23 AlfieriGPS23 [9]	Permutation flowshop problems minimizing core waiting time and core idle time		benchmark	0							848	1021
Caballero23 Caballero23 [87]	Scheduling through logic-based tools	SAT		1	-		-	PhD Thesis	RCPSP	-	849	1045
CzerniachowskaWZ23 Czernia-chowskaWZ23 [103]	Constraint Programming for Flexible Flow Shop Scheduling Problem with Repeated Jobs and Repeated Operations		benchmark, Roadef, real-world	0							850	1048
GurPAE23 GurPAE23 [182]	Operating room scheduling with surgical team: a new approach with constraint programming and goal programming	Cplex	real-life	0	n		n	-	-	-	851	1066
IsikYA23 IsikYA23 [213]	Constraint programming models for the hybrid flow shop scheduling problem and its extensions	OPL CP Opt	real-world, benchmark, generated instance, real-life	4	y		y	-	HFSP	alternative endBeforeStart noOverlap cumulative	852	1077
LacknerMMWW23 LacknerMMWW23 [254]	Exact methods for the Oven Scheduling Problem	MiniZinc OPL	random instance, industrial partner, benchmark, instance generator, zenodo, real-life	0	DZN JSON		y	[253]	OSP	alternative noOverlap forbidExtent	853	1090
MontemanniD23 MontemanniD23 [305]	Solving the Parallel Drone Scheduling Traveling Salesman Problem via Constraint Programming	OR-Tools	benchmark, supplementary material	6	ref	y	n	-	PDSTSP	circuit	854	1108
MontemanniD23a MontemanniD23a [304]	Constraint programming models for the parallel drone scheduling vehicle routing problem	OR-Tools	benchmark	0	ref		n	-	PDSTSP	circuit multipleCircuit	855	1109
NaderiRR23 NaderiRR23 [313]	Mixed-Integer Programming vs. Constraint Programming for Shop Scheduling Problems: New Results and Outlook		github, benchmark	8							856	1111
ShaikhK23 ShaikhK23 [379]	Management of electronic ledger: a constraint programming approach for solving curricula scheduling problems	?	benchmark, real-world	2	?		?	?	?	?	857	1140
YuraszeckMCCR23 YuraszeckMCCR23 [453]	A Constraint Programming Formulation of the Multi-Mode Resource-Constrained Project Scheduling Problem for the Flexible Job Shop Scheduling Problem	CP Opt	github, real-world, benchmark	0	ref		n	-	FJSSP	alternative endBeforeStart cumulative	858	1161

Table 7: Manually Defined ARTICLE Properties

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
abs-2305-19888 abs-2305-19888 [197]	Constraint Programming and Constructive Heuristics for Parallel Machine Scheduling with Sequence-Dependent Setups and Common Servers	CP Opt Gurobi	real-world, generated instance, gitlab, benchmark	1	y	y	n	-	$P|seq,ser|C_{max}$	alternative noOverlap cumulative	859	1177
abs-2306-05747 abs-2306-05747 [401]	An End-to-End Reinforcement Learning Approach for Job-Shop Scheduling Problems Based on Constraint Programming	custom Choco	real-world, supplementary material, github, industrial instance, benchmark	0	ref		n	-	JSSP	noOverlap	860	1178
abs-2312-13682 abs-2312-13682 [340]	A Constraint Programming Model for Scheduling the Unloading of Trains in Ports: Extended	custom	real-world, generated instance	0	n		n	-	SUTP	table disjunctive	861	1179
AbreuN22 AbreuN22 [109]	A new hybridization of adaptive large neighborhood search with constraint programming for open shop scheduling with sequence-dependent setup times	Cplex CP Opt	real-world, benchmark	0	y		n	-	OSSPST	noOverlap	862	1017
BourreauGGLT22 BourreauGGLT22 [81]	A constraint-programming based decomposition method for the Generalised Workforce Scheduling and Routing Problem (GWSRP)		real-world, benchmark	2							863	1043
CampeauG22 CampeauG22 [88]	Short- and medium-term optimization of underground mine planning using constraint programming	CP Opt	real-life, real-world	0	ref		n			pulse alwaysIn endBeforeStart noOverlap	864	1046
ColT22 ColT22 [101]	Industrial-size job shop scheduling with constraint programming		generated instance, supplementary material, github, real-life, benchmark, real-world	4							865	1047
FarsiTM22 FarsiTM22 [137]	Integrated surgery scheduling by constraint programming and meta-heuristics			0							866	No
Fatemi-AnarakiMFN22 Fatemi-AnarakiMFN22 [138]	Scheduling of Multi-Robot Job Shop Systems in Dynamic Environments: Mixed-Integer Linear Programming and Constraint Programming Approaches			0							867	No
FetgoD22 FetgoD22 [139]	Horizontally Elastic Edge-Finder Algorithm for Cumulative Resource Constraint Revisited		benchmark, real-world	7							868	1058
HeinzNVH22 HeinzNVH22 [196]	Constraint Programming and constructive heuristics for parallel machine scheduling with sequence-dependent setups and common servers		real-world, generated instance, benchmark, gitlab	3							869	1070
MullerMKP22 MullerMKP22 [309]	An algorithm selection approach for the flexible job shop scheduling problem: Choosing constraint programming solvers through machine learning		benchmark, random instance, real-world, github	3							870	1110
PohlAK22 PohlAK22 [345]	Solving the time-discrete winter runway scheduling problem: A column generation and constraint programming approach		benchmark, real-world	2							871	1125
ShiYXQ22 ShiYXQ22 [380]	Solving the integrated process planning and scheduling problem using an enhanced constraint programming-based approach			0							872	No

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
SubulanC22 SubulanC22 [391]	Constraint programming-based transformation approach for a mixed fuzzy-stochastic resource investment project scheduling problem		real-life, benchmark, real-world	2							873	1146
YunusogluY22 YunusogluY22 [450]	Constraint programming approach for multi-resource-constrained unrelated parallel machine scheduling problem with sequence-dependent setup times		real-world, benchmark, generated instance, real-life, supplementary material	10							874	1160
YuraszeckMPV22 YuraszeckMPV22 [452]	A Novel Constraint Programming Decomposition Approach for the Total Flow Time Fixed Group Shop Scheduling Problem		generated instance, github, benchmark, real-life	5							875	1162
abs-2211-14492 abs-2211-14492 [392]	Enhancing Constraint Programming via Supervised Learning for Job Shop Scheduling		benchmark, random instance, generated instance	1							876	1176
AbohashimaEG21 AbohashimaEG21 [2]	A Mathematical Programming Model and a Firefly-Based Heuristic for Real-Time Traffic Signal Scheduling With Physical Constraints		real-world, generated instance, github	0							877	1015
AbreuAPNM21 AbreuAPNM21 [108]	A new variable neighbourhood search with a constraint programming search strategy for the open shop scheduling problem with operation repetitions		generated instance, benchmark, real-world	8							878	1016
Bedhief21 Bedhief21 [44]	Comparing Mixed-Integer Programming and Constraint Programming Models for the Hybrid Flow Shop Scheduling Problem with Dedicated Machines		real-life	0							879	1031
FanXG21 FanXG21 [136]	Genetic programming-based hyper-heuristic approach for solving dynamic job shop scheduling problem with extended technical precedence constraints		benchmark	0							880	1057
HamPK21 HamPK21 [185]	Energy-Aware Flexible Job Shop Scheduling Using Mixed Integer Programming and Constraint Programming		benchmark, github	4							881	1069
HubnerGSV21 HubnerGSV21 [211]	Solving the nuclear dismantling project scheduling problem by combining mixed-integer and constraint programming techniques and metaheuristics		benchmark, real-life	4							882	1076
KoehlerBFFHPSSS21 KoehlerBFFH-PSSS21 [234]	Cable tree wiring - benchmarking solvers on a real-world scheduling problem with a variety of precedence constraints	CP Opt OR-Tools Chuffed Cplex Gurobi Z3 OptiMathSat	real-world, benchmark, github	9	DZN		y	-	CTW	alldifferent inverse	883	1082
PandeyS21a PandeyS21a [334]	Constraint programming versus heuristic approach to MapReduce scheduling problem in Hadoop YARN for energy minimization		benchmark	1							884	1122
QinWSLS21 QinWSLS21 [354]	A Genetic Programming-Based Scheduling Approach for Hybrid Flow Shop With a Batch Processor and Waiting Time Constraint			0							885	1130

Table 7: Manually Defined ARTICLE Properties

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
VlkHT21 VlkHT21 [432]	Constraint programming approaches to joint routing and scheduling in time-sensitive networks		industrial partner, random instance, github, benchmark	0							886	1154
ZhangYW21 ZhangYW21 [458]	A graph-based constraint programming approach for the integrated process planning and scheduling problem		benchmark	0							887	1167
abs-2102-08778 abs-2102-08778 [99]	Large-Scale Benchmarks for the Job Shop Scheduling Problem		generated instance, benchmark, real-life, real-world	0							888	1175
AlizdehS20 AlizdehS20 [10]	Fuzzy project scheduling with critical path including risk and resource constraints using linear programming			0							889	No
AstrandJZ20 AstrandJZ20 [23]	Underground mine scheduling of mobile machines using Constraint Programming and Large Neighborhood Search		benchmark, real-world, real-life	0							890	1023
BadicaBI20 BadicaBI20 [24]	Block structured scheduling using constraint logic programming		real-world, benchmark	5							891	1024
BenediktMH20 BenediktMH20 [55]	Power of pre-processing: production scheduling with variable energy pricing and power-saving states	CP Opt Gurobi	github, benchmark, random instance, generated instance	4	JSON		y				892	1036
FallahiAC20 FallahiAC20 [135]	Tabu search and constraint programming-based approach for a real scheduling and routing problem		github, real-life	0							893	1056
LunardiBLRV20 LunardiBLRV20 [283]	Mixed Integer linear programming and constraint programming models for the online printing shop scheduling problem		benchmark, random instance, generated instance, github	1							894	1101
MejiaY20 MejiaY20 [296]	A self-tuning variable neighborhood search algorithm and an effective decoding scheme for open shop scheduling problems with travel/setup times		supplementary material, benchmark, generated instance	2							895	1105
MengZRZL20 MengZRZL20 [298]	Mixed-integer linear programming and constraint programming formulations for solving distributed flexible job shop scheduling problem		supplementary material, benchmark	0							896	1106
MokhtarzadehTNF20 MokhtarzadehTNF20 [301]	Scheduling of human-robot collaboration in assembly of printed circuit boards: a constraint programming approach		generated instance, real-world	12							897	1107
Polo-MejiaALB20 Polo-MejiaALB20 [346]	Mixed-integer/linear and constraint programming approaches for activity scheduling in a nuclear research facility		Roadef, github	2							898	1126
QinDCS20 QinDCS20 [355]	Combining mixed integer programming and constraint programming to solve the integrated scheduling problem of container handling operations of a single vessel		real-life, benchmark	0							899	1129
SacramentoSP20 SacramentoSP20 [365]	Constraint Programming and Local Search Heuristic: a Matheuristic Approach for Routing and Scheduling Feeder Vessels in Multi-terminal Ports		benchmark, real-life, zenodo, real-world	4							900	1134
WallaceY20 WallaceY20 [435]	A new constraint programming model and solving for the cyclic hoist scheduling problem	MiniZinc	random instance, real-life, real-world, benchmark	2	DZN		y		CHSP		901	1156

Table 7: Manually Defined ARTICLE Properties

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
ZouZ20 ZouZ20 [467]	A constraint programming approach for scheduling repetitive projects with atypical activities considering soft logic		benchmark	3							902	1169
EscobetPQPRA19 EscobetPQPRA19 [130]	Optimal batch scheduling of a multiproduct dairy process using a combined optimization/constraint programming approach			1							903	1052
GurEA19 GurEA19 [468]	Surgical Operation Scheduling with Goal Programming and Constraint Programming: A Case Study		real-life	11							904	1065
NishikawaSTT19 NishikawaSTT19 [320]	A Constraint Programming Approach to Scheduling of Malleable Tasks		real-world, benchmark	0							905	1114
Novas19 Novas19 [322]	Production scheduling and lot streaming at flexible job-shops environments using constraint programming		benchmark	0							906	1116
WikarekS19 WikarekS19 [441]	A Constraint-Based Declarative Programming Framework for Scheduling and Resource Allocation Problems			0							907	1158
YounespourAKE19 YounespourAKE19 [448]	Using mixed integer programming and constraint programming for operating rooms scheduling with modified block strategy		real-life, real-world	6							908	1159
abs-1901-07914 abs-1901-07914 [47]	A Constraint Programming Approach to Simultaneous Task Allocation and Motion Scheduling for Industrial Dual-Arm Manipulation Tasks		benchmark, real-world, github	0							909	1171
abs-1902-01193 abs-1902-01193 [8]	Solving Nurse Scheduling Problem Using Constraint Programming Technique			0							910	1172
abs-1902-09244 abs-1902-09244 [187]	On constraint programming for a new flexible project scheduling problem with resource constraints		benchmark, industry partner, real-world	0							911	1173
abs-1911-04766 abs-1911-04766 [158]	Investigating Constraint Programming and Hybrid Methods for Real World Industrial Test Laboratory Scheduling		real-world, generated instance, industrial partner, github, benchmark, instance generator, real-life	10							912	1174
BaptisteB18 BaptisteB18 [27]	Redundant cumulative constraints to compute preemptive bounds			1							913	1025
BorghesiBLMB18 BorghesiBLMB18 [78]	Scheduling-based power capping in high performance computing systems		benchmark, real-life	3							914	1042
FahimiOQ18 FahimiOQ18 [133]	Linear-time filtering algorithms for the disjunctive constraint and a quadratic filtering algorithm for the cumulative not-first not-last	Choco	benchmark, random instance	0	(y)		n		RCPSP	disjunctive cumulative	915	1054
GedikKEK18 GedikKEK18 [156]	A constraint programming approach for solving unrelated parallel machine scheduling problem		benchmark	9							916	1061
GokgurHO18 GokgurHO18 [170]	Parallel machine scheduling with tool loading: a constraint programming approach		real-life, real-world	9							917	1063
Ham18 Ham18 [184]	Integrated scheduling of m-truck, m-drone, and m-depot constrained by time-window, drop-pickup, and m-visit using constraint programming			7							918	1068
LaborieRSV18 LaborieRSV18 [252]	IBM ILOG CP optimizer for scheduling - 20+ years of scheduling with constraints at IBM/ILOG	OP Opt	real-world, CSPlib, benchmark	3	-		-	-	-	-	919	1089

Table 7: Manually Defined ARTICLE Properties

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
PourDERB18 PourDERB18 [348]	A hybrid Constraint Programming/Mixed Integer Programming framework for the preventive signaling maintenance crew scheduling problem		real-life, benchmark, real-world, generated instance	1							920	1127
ShinBBHO18 ShinBBHO18 [381]	Discrete-Event Simulation and Integer Linear Programming for Constraint-Aware Resource Scheduling		github, real-world	4							921	1141
TangLWSK18 TangLWSK18 [398]	Scheduling Optimization of Linear Schedule with Constraint Programming			0							922	1148
ZhangW18 ZhangW18 [459]	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		benchmark	0							923	1166
KreterSS17 KreterSS17 [246]	Using constraint programming for solving RCPSP/max-cal	MiniZinc Chuffed Cplex	benchmark	5	dead			[245]	RCPSP	cumulative cumulativeCalenda	924	1087
NattafAL17 NattafAL17 [315]	Cumulative scheduling with variable task profiles and concave piecewise linear processing rate functions	Cplex	real-world	2	n		n	-	CECSP	-	925	1113
Bonfietti16 Bonfietti16 [69]	A constraint programming scheduling solver for the MPOpt programming environment		benchmark	10							926	1040
BridiBLMB16 BridiBLMB16 [83]	A Constraint Programming Scheduler for Heterogeneous High-Performance Computing Machines		real-world, real-life	0							927	1044
DoulabiRP16 DoulabiRP16 [124]	A Constraint-Programming-Based Branch-and-Price-and-Cut Approach for Operating Room Planning and Scheduling		real-world, generated instance	3							928	1051
NovaraNH16 NovaraNH16 [321]	A novel constraint programming model for large-scale scheduling problems in multiproduct multistage batch plants: Limited resources and campaign-based operation		CSPlib, benchmark	5							929	1115
ZarandiKS16 ZarandiKS16 [454]	A constraint programming model for the scheduling of JIT cross-docking systems with preemption		real-world	0							930	1163
EvenSH15a EvenSH15a [132]	A Constraint Programming Approach for Non-Preemptive Evacuation Scheduling		real-world, real-life	2							931	1053
GoelSHFS15 GoelSHFS15 [169]	Constraint programming for LNG ship scheduling and inventory management			0							932	1062
Kameugne15 Kameugne15 [220]	Propagation techniques of resource constraint for cumulative scheduling	-		2	-		-	PhDThesis	RCPSP		933	1078
LetortCB15 LetortCB15 [261]	Synchronized sweep algorithms for scalable scheduling constraints	Choco SICStus	generated instance, Roadef, benchmark, random instance	4	dead		-	[260]	-	cumulative dimCumulative dimCumulativePr	934	1092
NattafAL15 NattafAL15 [314]	A hybrid exact method for a scheduling problem with a continuous resource and energy constraints	Cplex	generated instance	1	n		n		CSCSP		935	1112
Siala15 Siala15 [382]	Search, propagation, and learning in sequencing and scheduling problems	-	benchmark	2	-		-	PhD Thesis			936	1142
SimoninAHL15 SimoninAHL15 [385]	Scheduling scientific experiments for comet exploration	MOST Ilog Scheduler		0	n		n	[384]		cumulative dataTransfer	937	1143
WangMD15 WangMD15 [438]	Scheduling operating theatres: Mixed integer programming vs. constraint programming		real-life, real-world	2							938	1157

Table 7: Manually Defined ARTICLE Properties

Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
BonfiettiLBM14 BonfiettiLBM14 [72]	CROSS cyclic resource-constrained scheduling solver		real-world, generated instance, industrial instance, benchmark	0							939	1041
GrimesIOS14 GrimesIOS14 [177]	Analyzing the impact of electricity price forecasting on energy cost-aware scheduling		real-world, real-life	9							940	1064
KameugneFSN14 KameugneFSN14 [224]	A quadratic edge-finding filtering algorithm for cumulative resource constraints	Gecode	random instance, benchmark	2	y			[223]	CuSP	cumulative	941	1079
NovasH14 NovasH14 [325]	Integrated scheduling of resource-constrained flexible manufacturing systems using constraint programming		benchmark	0							942	1119
BegB13 BegB13 [45]	A constraint programming approach for integrated spatial and temporal scheduling for clustered architectures		benchmark	0							943	1032
HeinzSB13 HeinzSB13 [195]	Using dual presolving reductions to reformulate cumulative constraints	Cplex SCIP	benchmark	1	ref		-	-	RCPSP RCPSP/max	cumulative	944	1071
OzturkTHO13 OzturkTHO13 [333]	Balancing and scheduling of flexible mixed model assembly lines	Ilog Solver Ilog Scheduler Cplex	real-world, real-life	2	y		-	-	SBSFMMAL	alldifferent disjunctive	945	1121
HeinzSSW12 HeinzSSW12 [193]	Solving steel mill slab design problems		real-world, CSPlib	2	Cplex		dead	-	SMSDP	-	946	1072
LimtanyakulS12 LimtanyakulS12 [268]	Improvements of constraint programming and hybrid methods for scheduling of tests on vehicle prototypes	Cplex Ilog Scheduler	random instance, real-life, generated instance, industrial partner, benchmark	1	dead		-	-			947	1094
LombardiM12 LombardiM12 [278]	Optimal methods for resource allocation and scheduling: a cross-disciplinary survey	-	real-world, benchmark	0	-		-	-	survey	-	948	1096
LombardiM12a LombardiM12a [277]	A min-flow algorithm for Minimal Critical Set detection in Resource Constrained Project Scheduling		benchmark	1							949	1097
NovasH12 NovasH12 [324]	A comprehensive constraint programming approach for the rolling horizon-based scheduling of automated wet-etch stations			0							950	1118
BartakS11 BartakS11 [37]	Constraint satisfaction for planning and scheduling problems	-	random instance, real-world, real-life	2	-		-		survey		951	1028
BeckFW11 BeckFW11 [43]	Combining Constraint Programming and Local Search for Job-Shop Scheduling		real-world, benchmark	0							952	1030
BeldiceanuCDP11 BeldiceanuCDP11 [50]	New filtering for the *cumulative* constraint in the context of non-overlapping rectangles		benchmark	1							953	1034
BeniniLMR11 BeniniLMR11 [58]	Optimal resource allocation and scheduling for the CELL BE platform		benchmark, real-world, instance generator	0							954	1037
HachemiGR11 HachemiGR11 [183]	A hybrid constraint programming approach to the log-truck scheduling problem			1							955	1067
KelbelH11 KelbelH11 [227]	Solving production scheduling with earliness/tardiness penalties by constraint programming		benchmark, random instance, generated instance	3							956	1080
KovacsB11 KovacsB11 [239]	A global constraint for total weighted completion time for unary resources	Ilog Scheduler	benchmark	2	n		n	-		Completion	957	1085

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Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
KovacsK11 KovacsK11 [241]	Constraint programming approach to a bilevel scheduling problem	Ilog Solver		2	n		n	-	Bilevel Opt		958	1086
SchausHMCMD11 SchausHMCMD11 [369]	Solving Steel Mill Slab Problems with constraint-based techniques: CP, LNS, and CBLS	Comet	benchmark, CSPlib, generated instance	3	dead				SMSDP		959	1137
SchuttFSW11 SchuttFSW11 [375]	Explaining the cumulative propagator	MiniZinc	benchmark, real-world	7	PSPLib		-	-	RCPSP	cumulative	960	1139
TopalogluO11 TopalogluO11 [409]	A constraint programming-based solution approach for medical resident scheduling problems		real-life	2							961	1150
TrojetHL11 TrojetHL11 [412]	Project scheduling under resource constraints: Application of the cumulative global constraint in a decision support framework		real-world	2							962	1151
BartakCS10 BartakCS10 [36]	Discovering implied constraints in precedence graphs with alternatives		benchmark, real-life, real-world	3							963	1027
BartakSR10 BartakSR10 [38]	New trends in constraint satisfaction, planning, and scheduling: a survey		real-life, real-world	0							964	1029
LombardiM10a LombardiM10a [275]	Allocation and scheduling of Conditional Task Graphs		real-world, benchmark, real-life	3							965	1095
LopesCSM10 LopesCSM10 [280]	A hybrid model for a multiproduct pipeline planning and scheduling problem	Ilog Solver	benchmark, real-world	2	-		-	[308, 307]			966	1098
NovasH10 NovasH10 [323]	Reactive scheduling framework based on domain knowledge and constraint programming			0							967	1117
ZeballosQH10 ZeballosQH10 [456]	A constraint programming model for the scheduling of flexible manufacturing systems with machine and tool limitations		benchmark, real-world	4							968	1165
BocewiczBB09 BocewiczBB09 [65]	Logic-algebraic method based and constraints programming driven approach to AGVs scheduling			0							969	1039
GarridoAO09 GarridoAO09 [150]	A constraint programming formulation for planning: from plan scheduling to plan generation		benchmark	8							970	1059
RuggieroBBMA09 RuggieroBBMA09 [364]	Reducing the Abstraction and Optimality Gaps in the Allocation and Scheduling for Variable Voltage/Frequency MPSoC Platforms		instance generator, real-life	0							971	1133
abs-0907-0939 abs-0907-0939 [342]	The Soft Cumulative Constraint		real-world	0							972	1170
GarridoOS08 GarridoOS08 [151]	Planning and scheduling in an e-learning environment. A constraint-programming-based approach		real-world	0							973	1060
KovacsB08 KovacsB08 [238]	A global constraint for total weighted completion time for cumulative resources		benchmark	0							974	1084
LiessM08 LiessM08 [263]	A constraint programming approach for the resource-constrained project scheduling problem		benchmark	0							975	1093
MalikMB08 MalikMB08 [291]	Optimal Basic Block Instruction Scheduling for Multiple-Issue Processors Using Constraint Programming		benchmark	0							976	1102
Rodriguez07 Rodriguez07 [362]	A constraint programming model for real-time train scheduling at junctions		real-life	2							977	1131
Simonis07 Simonis07 [387]	Models for Global Constraint Applications	CHIP		0	n		n			cumulative diffn cycle inverse	978	1144

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Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
Hooker06 Hooker06 [207]	An Integrated Method for Planning and Scheduling to Minimize Tardiness	OPL Cplex Ilog Scheduler	random instance	2	n		n	[206]	CuSP	cumulative	979	1075
KhayatLR06 KhayatLR06 [229]	Integrated production and material handling scheduling using mathematical programming and constraint programming		real-life, benchmark	1							980	1081
SadykovW06 SadykovW06 [367]	Integer Programming and Constraint Programming in Solving a Multimachine Assignment Scheduling Problem with Deadlines and Release Dates		generated instance	1							981	1135
SureshMOK06 SureshMOK06 [394]	Divisible load scheduling in distributed system with buffer constraints: genetic algorithm and linear programming approach			0							982	1147
Hooker05 Hooker05 [205]	A Hybrid Method for the Planning and Scheduling	OPL Cplex Ilog Scheduler	random instance	0	n		n	[204]	CuSP	cumulative	983	1074
VilimBC05 VilimBC05 [429]	Extension of $O(n \log n)$ Filtering Algorithms for the Unary Resource Constraint to Optional Activities		benchmark, real-life	0	n		n	[428]	JSSP	disjunctive	984	1153
ZeballosH05 ZeballosH05 [455]	A Constraint Programming Approach to FMS Scheduling. Consideration of Storage and Transportation Resources			0							985	1164
PoderBS04 PoderBS04 [344]	Computing a lower approximation of the compulsory part of a task with varying duration and varying resource consumption			0							986	1124
KuchcinskiW03 KuchcinskiW03 [247]	Global approach to assignment and scheduling of complex behaviors based on HCDG and constraint programming		benchmark	0							987	1088
Tsang03 Tsang03 [413]	Constraint Based Scheduling: Applying Constraint Programming to Scheduling Problems		real-life	0							988	1152
LorigeonBB02 LorigeonBB02 [282]	A dynamic programming algorithm for scheduling jobs in a two-machine open shop with an availability constraint			0							989	1100
RodriguezDG02 RodriguezDG02 [361]	Railway infrastructure saturation using constraint programming approach			0							990	1132
Timpe02 Timpe02 [407]	Solving planning and scheduling problems with combined integer and constraint programming			0							991	1149
MartinPY01 MartinPY01 [293]	Cane Railway Scheduling via Constraint Logic Programming: Labelling Order and Constraints in a Real-Life Application		real-life	0							992	1103
Mason01 Mason01 [294]	Elastic Constraint Branching, the Wedelin/Carmen Lagrangian Heuristic and Integer Programming for Personnel Scheduling			0							993	1104
ArtiguesR00 ArtiguesR00 [18]	A polynomial activity insertion algorithm in a multi-resource schedule with cumulative constraints and multiple modes			0							994	1022
BaptisteP00 BaptisteP00 [30]	Constraint Propagation and Decomposition Techniques for Highly Disjunctive and Highly Cumulative Project Scheduling Problems	CLAIRE	benchmark	0	n		n		RCCSP	cumulative	995	1026
HeipckeCCS00 HeipckeCCS00 [198]	Scheduling under Labour Resource Constraints	COME SchedEns	benchmark, instance generator	0	dead		n	-			996	1073
KorbaaYG00 KorbaaYG00 [236]	Solving Transient Scheduling Problems with Constraint Programming			0							997	1083

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Key	Title (Local Copy)	CP System	Bench	Links	Data Avail	Sol Avail	Code Avail	Based On	Classification	Constraints	a	b
LopezAKYG00 LopezAKYG00 [281]	Discussion on: 'Solving Transient Scheduling Problems with Constraint Programming' by O. Korbaa, P. Yim, and J.-C. Gentina			0							998	1099
SakkoutW00 SakkoutW00 [368]	Probe Backtrack Search for Minimal Perturbation in Dynamic Scheduling	Cplex ECLiPSe	benchmark, real-world	0	n		n	-	KRFP		999	1136
SchildW00 SchildW00 [370]	Scheduling of Time-Triggered Real-Time Systems	OZ		0	n		n	-		disjunctive	1000	1138
SourdN00 SourdN00 [389]	Multiple-Machine Lower Bounds for Shop-Scheduling Problems		real-life, benchmark	1							1001	1145
BensanaLV99 BensanaLV99 [59]	Earth Observation Satellite Management	Ilog Solver	benchmark	0	?		-	-			1002	1038
BelhadjiI98 BelhadjiI98 [53]	Temporal Constraint Satisfaction Techniques in Job Shop Scheduling Problem Solving	-	real-life	0	n		n	-	TCSP JSSP		1003	1035
NuijtenP98 NuijtenP98 [327]	Constraint-Based Job Shop Scheduling with \sc Ilog Scheduler		real-life	0							1004	1120
PapaB98 PapaB98 [336]	Resource Constraints for Preemptive Job-shop Scheduling	Ilog Solver Claire	benchmark	0	dead		-	-	PJSSP	disjunctive flow	1005	1123
Darby-DowmanLMZ97 Darby-DowmanLMZ97 [105]	Constraint Logic Programming and Integer Programming Approaches and Their Collaboration in Solving an Assignment Scheduling Problem	Cplex ECLiPSe	real-life, real-world, benchmark	0	n		n	-	MGAP		1006	1049
FalaschiGMP97 FalaschiGMP97 [134]	Constraint Logic Programming with Dynamic Scheduling: A Semantics Based on Closure Operators			0							1007	1055
LammaMM97 LammaMM97 [256]	A distributed constraint-based scheduler		real-life	0							1008	1091
Zhou97 Zhou97 [462]	A Permutation-Based Approach for Solving the Job-Shop Problem	-	benchmark	0	n		n	[461]	JSSP	sort alldifferent permutation	1009	1168
Wallace96 Wallace96 [434]	Practical Applications of Constraint Programming	-		0	-		-	-	Survey	-	1010	1155
BeldiceanuC94 BeldiceanuC94 [48]	Introducing Global Constraints in CHIP		real-world, real-life, benchmark	0							1011	1033
AggounB93 AggounB93 [5]	Extending CHIP in order to solve complex scheduling and placement problems		real-world	0							1012	1019
Tay92 Tay92 [402]	COPS: A Constraint Programming Approach to Resource-Limited Project Scheduling			0							1013	No
DincbasSH90 DincbasSH90 [121]	Solving Large Combinatorial Problems in Logic Programming		real-life	0							1014	1050

4 Authors

Table 8: Co-Authors of Articles/Papers

Author	Entries
Michela Milano	BorghesiBLMB18 [78], BonfiettiZLM16 [76], BridiBLMB16 [83], BridiLBBM16 [84], LombardiBM15 [272], BartoliniBBBLM14 [40], BonfiettiLM14 [74], BonfiettiLBM14 [72], BonfiettiLM13 [73], LombardiM13 [279], LombardiM12 [278], BonfiettiLBM12 [71], LombardiM12a [277], BonfiettiM12 [75], BonfiettiLBM11 [70], LombardiBMB11 [273], BeniniLMR11 [58], LombardiM10 [276], LombardiM10a [275], LombardiM09 [274], RuggieroBBMA09 [364], BeniniBGM06 [57], LammaMM97 [256], BrusoniCLMMT96 [85]
Michele Lombardi	BorghesiBLMB18 [78], BonfiettiZLM16 [76], BridiBLMB16 [83], BridiLBBM16 [84], LombardiBM15 [272], BartoliniBBBLM14 [40], BonfiettiLM14 [74], BonfiettiLBM14 [72], BonfiettiLM13 [73], LombardiM13 [279], LombardiM12 [278], BonfiettiLBM12 [71], LombardiM12a [277], BonfiettiLBM11 [70], LombardiBMB11 [273], BeniniLMR11 [58], LombardiM10 [276], LombardiM09 [274], HoeveGSL07 [418]
Andreas Schutt	YangSS19 [447], KreterSS17 [246], YoungFS17 [449], GoldwaserS17 [171], SchuttS16 [376], SzerediS16 [396], KreterSS15 [245], EvenSH15 [131], EvenSH15a [132], SchuttFS13 [373], SchuttFS13a [372], GuSS13 [181], SchuttCSW12 [371], SchuttFSW11 [375], SchuttW10 [377], SchuttFSW09 [374]
J. Christopher Beck	LuoB22 [285], TangB20 [397], BoothNB16 [77], KoschB14 [237], HeinzSB13 [195], HeinzKB13 [192], HeinzB12 [191], KovacsB11 [239], BeckFW11 [43], WatsonB08 [439], KovacsB08 [238], CarchraeBF05 [90], WuBB05 [446], BeckDF97 [42]
Nicolas Beldiceanu	Madi-WambaLOBM17 [287], Madi-WambaB16 [286], LetortCB15 [261], LetortCB13 [260], LetortBC12 [259], ClercqPBJ11 [97], BeldiceanuCDP11 [50], BeldiceanuCP08 [51], PoderB08 [343], BeldiceanuP07 [52], PoderBS04 [344], BeldiceanuC02 [49], AggounB93 [5]
Emmanuel Hebrard	JuvinHHL23 [217], AntuoriHHEN21 [12], GodetLHS20 [168], SimoninAHL15 [385], SialaAH15 [383], BessiereHMQW14 [61], SimoninAHL12 [384], BillautHL12 [62], GrimesH11 [175], GrimesH10 [174], GrimesHM09 [176], HebrardTW05 [189]
Peter J. Stuckey	YangSS19 [447], DemirovicS18 [115], KreterSS17 [246], SchuttS16 [376], KreterSS15 [245], BurtLPS15 [86], SchuttFS13 [373], SchuttFS13a [372], GuSS13 [181], SchuttCSW12 [371], SchuttFSW11 [375], SchuttFSW09 [374]
Roman Barták	SvancaraB22 [395], JelinekB16 [214], BartakV15 [39], Bartak14 [35], BartakS11 [37], BartakCS10 [36], BartakSR10 [38], VilimBC05 [429], VilimBC04 [428], Bartak02 [34], Bartak02a [33]
Pierre Lopez	JuvinHHL23 [217], JuvinHL23 [218], Polo-MejiaALB20 [346], NattafAL17 [315], SimoninAHL15 [385], NattafAL15 [314], SimoninAHL12 [384], BillautHL12 [62], LahimerLH11 [255], TrojetHL11 [412], LopezAKYG00 [281]
Petr Vilím	LaborieRSV18 [252], VilimLS15 [430], Vilim11 [427], Vilim09 [425], Vilim09a [426], VilimBC05 [429], Vilim05 [424], VilimBC04 [428], Vilim04 [423], Vilim03 [422], Vilim02 [421]
Christian Artigues	PovedaAA23 [349], PohlAK22 [345], Polo-MejiaALB20 [346], NattafAL17 [315], SimoninAHL15 [385], NattafAL15 [314], SialaAH15 [383], SimoninAHL12 [384], ArtiguesBF04 [17], ArtiguesR00 [18]
Luca Benini	BorghesiBLMB18 [78], BridiBLMB16 [83], BridiLBBM16 [84], BonfiettiLBM14 [72], BonfiettiLBM12 [71], BonfiettiLBM11 [70], LombardiBMB11 [273], BeniniLMR11 [58], RuggieroBBMA09 [364], BeniniBGM06 [57]
Alessio Bonfietti	BonfiettiZLM16 [76], Bonfietti16 [69], LombardiBM15 [272], BonfiettiLM14 [74], BonfiettiLBM14 [72], BonfiettiLM13 [73], BonfiettiLBM12 [71], BonfiettiM12 [75], BonfiettiLBM11 [70], LombardiBMB11 [273]
Philippe Laborie	LunardiBLRV20 [283], LaborieRSV18 [252], Laborie18a [251], MelgarejoLS15 [6], VilimLS15 [430], Laborie09 [250], BaptisteLPN06 [28], GodardLN05 [166], FocacciLN00 [140]
John N. Hooker	Hooker17 [208], HechingH16 [190], CireCH13 [96], CobanH10 [98], Hooker06 [207], Hooker05 [205], Hooker05a [206], Hooker04 [204], HookerY02 [209]
Claude-Guy Quimper	BoudreaultSLQ22 [80], OuelletQ22 [331], Mercier-AubinGQ20 [299], FahimiOQ18 [133], KameugneFGOQ18 [221], OuelletQ18 [330], GingrasQ16 [165], BessiereHMQW14 [61], OuelletQ13 [329]
Pierre Schaus	CappartS17 [89], CauwelaertDMS16 [92], DejemeppeCS15 [112], GayHLS15 [152], GayHS15 [153], GayHS15a [154], HoundjiSWD14 [210], GaySS14 [155], SchausHMCMD11 [369]
Pascal Van Hentenryck	FontaineMH16 [141], EvenSH15 [131], EvenSH15a [132], SchausHMCMD11 [369], MonetteDH09 [303], DoomsH08 [122], HentenryckM08 [200], HentenryckM04 [199], DincbasSH90 [121]
Philippe Baptiste	BaptisteB18 [27], Baptiste09 [26], BaptisteLPN06 [28], ArtiouchineB05 [19], BaptisteP00 [30], PapaB98 [336], BaptisteP97 [29], PapeB97 [335]
Mats Carlsson	WessenCS20 [440], MossigeGSMC17 [306], LetortCB15 [261], LetortCB13 [260], LetortBC12 [259], BeldiceanuCDP11 [50], BeldiceanuCP08 [51], BeldiceanuC02 [49]
Nysret Musliu	LacknerMMWW23 [254], WinterMMW22 [442], LacknerMMWW21 [253], GeibingerKKMMW21 [157], GeibingerMM21 [160], GeibingerMM19 [159], abs-1911-04766 [158], KletzanderM17 [233]
Helmut Simonis	ArmstrongGOS22 [15], ArmstrongGOS21 [14], GrimesIOS14 [177], IfrimOS12 [212], Simonis07 [387], SimonisC95 [388], Simonis95 [386], DincbasSH90 [121]
Zdenek Hanzálek	Mehdizadeh-Somarin23 [295], abs-2305-19888 [197], HeinzNVH22 [196], VlkHT21 [432], BenediktMH20 [55], BenediktSMVH18 [56], KelbelH11 [227]
Gabriela P. Henning	NovaraNH16 [321], NovasH14 [325], NovasH12 [324], NovasH10 [323], ZeballosQH10 [456], ZeballosH05 [455], QuirogaZH05 [357]
Mark Wallace	WallaceY20 [435], He0GLW18 [188], SchuttFSW09 [374], SakkoutW00 [368], RodosekW98 [360], Wallace96 [434], Wallace94 [433]
Stefan Heinz	HeinzSB13 [195], HeinzKB13 [192], HeinzSSW12 [193], HeinzB12 [191], HeinzS11 [194], BertholdHLMS10 [60]
András Kovács	KovacsB11 [239], KovacsK11 [241], KovacsB08 [238], KovacsV06 [243], KovacsEKV05 [240], KovacsV04 [242]
Claude Le Pape	BaptisteLPN06 [28], BaptisteP00 [30], NuijtenP98 [327], BaptisteP97 [29], PapeB97 [335]
Emmanuel Poder	BeldiceanuCDP11 [50], abs-0907-0939 [342], BeldiceanuCP08 [51], PoderB08 [343], BeldiceanuP07 [52], PoderBS04 [344]
Yves Deville	HoundjiSWD14 [210], DejemeppeD14 [113], SchausHMCMD11 [369], MonetteDH09 [303], MonetteDD07 [302]
Thibaut Feydy	YoungFS17 [449], SchuttFS13 [373], SchuttFS13a [372], SchuttFSW11 [375], SchuttFSW09 [374]

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Roger Kameugne	KameugneFND23 [222], KameugneFGOQ18 [221], Kameugne15 [220], KameugneFSN14 [224], KameugneFSN11 [223]
Juan M. Novas	Novas19 [322], NovaraNH16 [321], NovasH14 [325], NovasH12 [324], NovasH10 [323]
Wim Nuijten	BaptisteLPN06 [28], GodardLN05 [166], SourdN00 [389], FocacciLN00 [140], NuijtenP98 [327]
Louis-Martin Rousseau	DoulabiRP16 [124], PesantRR15 [341], DoulabiRP14 [123], ChapadosJR11 [94], HachemiGR11 [183]
Marek Vlk	abs-2305-19888 [197], HeinzNVH22 [196], VlkHT21 [432], BenediktSMVH18 [56], BartakV15 [39]
André A. Ciré	CireCH13 [96], LopesCSM10 [280], MouraSCL08 [308], MouraSCL08a [307]
Andrea Bartolini	BorghesiBLMB18 [78], BridiBLMB16 [83], BridiLBBM16 [84], BartoliniBBLM14 [40]
Cyrille Dejemeppe	CauwelaertDMS16 [92], Dejemeppe16 [111], DejemeppeCS15 [112], DejemeppeD14 [113]
Steven Gay	GayHLS15 [152], GayHS15 [153], GayHS15a [154], GaySS14 [155]
Tobias Geibinger	GeibingerKKMMW21 [157], GeibingerMM21 [160], GeibingerMM19 [159], abs-1911-04766 [158]
Diarmuid Grimes	GrimesIOS14 [177], GrimesH11 [175], GrimesH10 [174], GrimesHM09 [176]
Laurent Michel	TardivoDFMP23 [399], SchausHMCMD11 [369], HentenryckM08 [200], HentenryckM04 [199]
Florian Mischek	GeibingerKKMMW21 [157], GeibingerMM21 [160], GeibingerMM19 [159], abs-1911-04766 [158]
Jean-Noël Monette	CauwelaertDMS16 [92], SchausHMCMD11 [369], MonetteDH09 [303], MonetteDD07 [302]
Margaux Nattaf	NattafM20 [316], MalapertN19 [289], NattafAL17 [315], NattafAL15 [314]
Barry O'Sullivan	ArmstrongGOS22 [15], ArmstrongGOS21 [14], GrimesIOS14 [177], IfrimOS12 [212]
Yanick Ouellet	OuelletQ22 [331], FahimiOQ18 [133], KameugneFGOQ18 [221], OuelletQ18 [330]
Gilles Pesant	AalianPG23 [1], DoulabiRP16 [124], PesantRR15 [341], DoulabiRP14 [123]
Thierry Petit	DerrienP14 [117], DerrienPZ14 [118], ClercqPBJ11 [97], abs-0907-0939 [342]
Christine Solnon	GroleazNS20 [179], GroleazNS20a [178], SacramentoSP20 [365], MelgarejoLS15 [6]
József Váncza	KovacsV06 [243], KovacsEKV05 [240], KovacsV04 [242], VanczaM01 [419]
Felix Winter	LacknerMMWW23 [254], WinterMMW22 [442], LacknerMMWW21 [253], GeibingerKKMMW21 [157]
Armin Wolf	GeitzGSSW22 [161], SchuttW10 [377], WolfS05 [444], Wolf03 [443]
Francisco Yuraszeck	YuraszeckMCCR23 [453], YuraszeckMC23 [451], YuraszeckMPV22 [452], MejiaY20 [296]
Max Åstrand	Astrand0F21 [21], Astrand21 [20], AstrandJZ20 [23], AstrandJZ18 [22]
Miguel A. Salido	BartakS11 [37], BartakSR10 [38], AbrilSB05 [3]
Sévérine Betmbe Fetgo	KameugneFND23 [222], FetgoD22 [139], KameugneFGOQ18 [221]
Miquel Bofill	BofillCSV17 [66], BofillGSV15 [68], BofillEGPSV14 [67]
Thomas Bridi	BridiBLMB16 [83], BridiLBBM16 [84], BartoliniBBLM14 [40]
Cid C. de Souza	MouraSCL08 [308], MouraSCL08a [307], HeipckeCCS00 [198]
Ondrej Cepek	BartakCS10 [36], VilimBC05 [429], VilimBC04 [428]
Erich Christian Teppan	Teppan22 [403], ColT22 [101], ColT19 [100]
Giacomo Da Col	ColT22 [101], abs-2102-08778 [99], ColT19 [100]
Sophie Demassey	HermenierDL11 [201], BeldiceanuCDP11 [50], Demassey03 [114]
Alban Derrien	Derrien15 [116], DerrienP14 [117], DerrienPZ14 [118]
Michele Garraffa	AlfieriGPS23 [9], ArmstrongGOS22 [15], ArmstrongGOS21 [14]
Martin Gebser	TasselS23 [400], abs-2306-05747 [401], KovacsTKSG21 [244]
Jean-Claude Gentina	KorbaaYG00 [236], LopezAKYG00 [281], KorbaaYG99 [235]
Renaud Hartert	GayHLS15 [152], GayHS15 [153], GayHS15a [154]
Brahim Hnich	GokgurHO18 [170], OzturkTHO13 [333], RossiTHP07 [363]
Andrew J. Davenport	Davenport10 [106], DavenportKRSH07 [107], BeckDF97 [42]
Mikael Johansson	Astrand0F21 [21], AstrandJZ20 [23], AstrandJZ18 [22]
Narendra Jussien	ClercqPBJ11 [97], ElkhyariGJ02 [127], ElkhyariGJ02a [128]
Tamás Kis	KovacsK11 [241], KeriK07 [228], KovacsEKV05 [240]
Ouajdi Korbaa	KorbaaYG00 [236], LopezAKYG00 [281], KorbaaYG99 [235]
Krzysztof Kuchcinski	WolinskiKG04 [445], KuchcinskiW03 [247], GruianK98 [180]
Arnaud Letort	LetortCB15 [261], LetortCB13 [260], LetortBC12 [259]
Arnaud Malapert	NattafM20 [316], MalapertN19 [289], GrimesHM09 [176]
Tony Minoru Tamura Lopes	LopesCSM10 [280], MouraSCL08 [308], MouraSCL08a [307]
Hiroki Nishikawa	NishikawaSTT19 [320], NishikawaSTT18 [318], NishikawaSTT18a [319]
Cédric Pralet	SquillaciPR23 [390], Pralet17 [350], PraletLJ15 [351]
Dhananjay R. Thiruvady	abs-2402-00459 [317], abs-2211-14492 [392], ThiruvadyBME09 [406]
Levi Ribeiro de Abreu	AbreuNP23 [110], AbreuN22 [109], AbreuAPNM21 [108]
Jens Schulz	HeinzSB13 [195], HeinzS11 [194], BertholdHLMS10 [60]
Marcelo Seido Nagano	AbreuNP23 [110], AbreuN22 [109], AbreuAPNM21 [108]
Kana Shimada	NishikawaSTT19 [320], NishikawaSTT18 [318], NishikawaSTT18a [319]

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Gilles Simonin	GodetLHS20 [168], SimoninAHL15 [385], SimoninAHL12 [384]
Josep Suy	BofillCSV17 [66], BofillGSV15 [68], BofillEGPSV14 [67]
Ittetsu Taniguchi	NishikawaSTT19 [320], NishikawaSTT18 [318], NishikawaSTT18a [319]
Pierre Tassel	TasselGS23 [400], abs-2306-05747 [401], KovacsTKSG21 [244]
Hiroyuki Tomiyama	NishikawaSTT19 [320], NishikawaSTT18 [318], NishikawaSTT18a [319]
Seyda Topaloglu Yildiz	IsikYA23 [213], YunusogluY22 [450], KucukY19 [249]
Arnaldo Vieira Moura	LopesCSM10 [280], MouraSCL08 [308], MouraSCL08a [307]
Mateu Villaret	BofillCSV17 [66], BofillGSV15 [68], BofillEGPSV14 [67]
Daniel Walkiewicz	LacknerMMWW23 [254], WinterMMW22 [442], LacknerMMWW21 [253]
Toby Walsh	GelainPRVW17 [162], BessiereHMQW14 [61], HebrardTW05 [189]
Pascal Yim	KorbaaYG00 [236], LopezAKYG00 [281], KorbaaYG99 [235]
Alessandro Zanarini	AstrandJZ20 [23], AstrandJZ18 [22], BonfiettiZLM16 [76]
Luis Zeballos	ZeballosQH10 [456], ZeballosH05 [455], QuirogaZH05 [357]
Laurence A. Wolsey	HoundjiSWD14 [210], SadykovW06 [367]
Bruno A. Prata	PrataAN23 [352], AbreuNP23 [110]
Eddie Armstrong	ArmstrongGOS22 [15], ArmstrongGOS21 [14]
Amelia Badica	BadicaBI20 [24], BadicaBIL19 [25]
Costin Badica	BadicaBI20 [24], BadicaBIL19 [25]
Pierre Baptiste	BoucherBVBL97 [79], BaptisteLV92 [31]
Nicolas Barnier	WangB23 [437], WangB20 [436]
Ondrej Benedikt	BenediktMH20 [55], BenediktSMVH18 [56]
Davide Bertozzi	RuggieroBBMA09 [364], BeniniBGM06 [57]
Jean-Charles Billaut	BillautHL12 [62], LorigeonBB02 [282]
Andrea Borghesi	BorghesiBLMB18 [78], BartoliniBBLM14 [40]
Dario Canut-de-Bon	YuraszeckMCCR23 [453], YuraszeckMC23 [451]
Quentin Cappart	PopovicCGNC22 [347], CappartS17 [89]
Amedeo Cesta	OddiPCC03 [328], CestaOS98 [93]
Elvin Coban	CireCH13 [96], CobanH10 [98]
Yves Colombani	HeipckeCCS00 [198], Colombani96 [102]
Joseph D. Scott	KameugneFSN14 [224], KameugneFSN11 [223]
Mauro Dell'Amico	MontemanniD23 [305], MontemanniD23a [304]
Hani El Sakkout	KamarainenS02 [219], SakkoutW00 [368]
Abdallah Elkhyari	ElkhyariGJ02 [127], ElkhyariGJ02a [128]
Tamer Eren	GurPAE23 [182], GurEA19 [468]
Caroline Even	EvenSH15 [131], EvenSH15a [132]
Minhaz F. Zibran	ZibranR11 [465], ZibranR11a [466]
Azadeh Farsi	FarsiTM22 [137], MokhtarzadehTNF20 [301]
Dominique Feillet	Acuna-AgostMFG09 [4], ArtiguesBF04 [17]
Mark G. Wallace	SchuttCSW12 [371], SchuttFSW11 [375]
Maurizio Gabbrielli	LiuCGM17 [270], FalaschiGMP97 [134]
Michel Gamache	AalianPG23 [1], CampeauG22 [88]
Marc Garcia	BofillGSV15 [68], BofillEGPSV14 [67]
Antonio Garrido	GarridoAO09 [150], GarridoOS08 [151]
Vincent Gingras	KameugneFGOQ18 [221], GingrasQ16 [165]
Arthur Godet	Godet21a [167], GodetLHS20 [168]
Arnaud Gotlieb	MossigeGSMC17 [306], AlesioNBG14 [119]
Lucas Groleaz	GroleazNS20 [179], GroleazNS20a [178]
Christelle Guéret	ElkhyariGJ02 [127], ElkhyariGJ02a [128]
Andy Ham	HamPK21 [185], Ham18 [184]
Vilém Heinz	abs-2305-19888 [197], HeinzNVH22 [196]
Seyed Hossein Hashemi Doulabi	DoulabiRP16 [124], DoulabiRP14 [123]
Laurent Houssin	JuvinHHL23 [217], JuvinHL23 [218]
Georgiana Ifrim	GrimesIOS14 [177], IfrimOS12 [212]
Mirjana Ivanovic	BadicaBI20 [24], BadicaBIL19 [25]
Willem Jan van Hoeve	HoeveGSL07 [418], GomesHS06 [173]
Carla Juvin	JuvinHHL23 [217], JuvinHL23 [218]

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Chanchal K. Roy	ZibranR11 [465], ZibranR11a [466]
Lucas Kletzander	GeibingerKKMMW21 [157], KletzanderM17 [233]
Stefan Kreter	KreterSS17 [246], KreterSS15 [245]
Jan Kristof Behrens	BehrensLM19 [46], abs-1901-07914 [47]
Marie-Louise Lackner	LacknerMMWW23 [254], LacknerMMWW21 [253]
Arnaud Lallouet	PerezGSL23 [339], abs-2312-13682 [340]
Evelina Lamma	LammaMM97 [256], BrusoniCLMMT96 [85]
Ralph Lange	BehrensLM19 [46], abs-1901-07914 [47]
Bruno Legeard	BoucherBVBL97 [79], BaptisteLV92 [31]
Michel Lemaître	VerfaillieL01 [420], BensanaLV99 [59]
BoonPing Lim	LimHTB16 [265], LimBTBB15 [266]
Kamol Limtanyakul	LimtanyakulS12 [268], Limtanyakul07 [267]
James Little	KrogtLPHJ07 [417], Darby-DowmanLMZ97 [105]
Shixin Liu	LiFJZLL22 [262], ZhangJZL22 [457]
Xavier Lorca	GodetLHS20 [168], HermenierDL11 [201]
Abid M. Malik	Malik08 [290], MalikMB08 [291]
Gilles Madi-Wamba	Madi-WambaLOBM17 [287], Madi-WambaB16 [286]
Masoumeh Mansouri	BehrensLM19 [46], abs-1901-07914 [47]
Gonzalo Mejía	YuraszeckMC23 [451], MejiaY20 [296]
Paola Mello	LammaMM97 [256], BrusoniCLMMT96 [85]
Philippe Michelon	Acuna-AgostMFG09 [4], LiessM08 [263]
Mahdi Mokhtarzadeh	FarsiTM22 [137], MokhtarzadehTNF20 [301]
Roberto Montemanni	MontemanniD23 [305], MontemanniD23a [304]
Christoph Mrkvicka	LacknerMMWW23 [254], LacknerMMWW21 [253]
István Módos	BenediktMH20 [55], BenediktSMVH18 [56]
Kenneth N. Brown	MurphyMB15 [311], WuBB05 [446]
Samba Ndojh Ndiaye	GroleazNS20 [179], GroleazNS20a [178]
Youcheu Ngo-Kateu	KameugneFSN14 [224], KameugneFSN11 [223]
Su Nguyen	abs-2402-00459 [317], abs-2211-14492 [392]
Antonín Novák	abs-2305-19888 [197], HeinzNVH22 [196]
Angelo Oddi	OddiPCC03 [328], CestaOS98 [93]
Eva Onaindia	GarridoAO09 [150], GarridoOS08 [151]
Carla P. Gomes	HoeveGSL07 [418], GomesHS06 [173]
Laure Pauline Fotso	KameugneFSN14 [224], KameugneFSN11 [223]
Guillaume Perez	PerezGSL23 [339], abs-2312-13682 [340]
Erwin Pesch	MullerMKP22 [309], BlazewiczEP19 [64]
Enrico Pontelli	TardivoDFMP23 [399], VillaverdeP04 [431]
Oscar Quiroga	ZeballosQH10 [456], QuirogaZH05 [357]
Günther R. Raidl	FrohnerTR19 [146], RendlPHPR12 [358]
Francesca Rossi	GelainPRVW17 [162], BartakSR10 [38]
Martino Ruggiero	BeniniLMR11 [58], RuggieroBBMA09 [364]
Ruslan Sadykov	SadykovW06 [367], Sadykov04 [366]
Konstantin Schekotihin	TasselGS23 [400], abs-2306-05747 [401]
Christian Schulte	WessenCS20 [440], FrimodigS19 [145]
Bart Selman	HoeveGSL07 [418], GomesHS06 [173]
Paul Shaw	LaborieRSV18 [252], VilimLS15 [430]
Mohamed Siala	Siala15 [382], SialaAH15 [383]
Wijnand Suijlen	PerezGSL23 [339], abs-2312-13682 [340]
Yuan Sun	abs-2402-00459 [317], abs-2211-14492 [392]
Andreas T. Ernst	abs-2211-14492 [392], ThiruvadyBME09 [406]
Reza Tavakkoli-Moghaddam	Mehdizadeh-Somarin23 [295], MokhtarzadehTNF20 [301]
Clémentin Tayou Djamégni	KameugneFND23 [222], FetgoD22 [139]
Erich Teppan	abs-2102-08778 [99], FriedrichFMRSST14 [144]
Alexander Tesch	Tesch18 [405], Tesch16 [404]
Sylvie Thiébaux	LimHTB16 [265], LimBTBB15 [266]
Behdin Vahedi Nouri	Mehdizadeh-Somarin23 [295], MokhtarzadehTNF20 [301]

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Sascha Van Cauwelaert	CauwelaertDMS16 [92], DejemeppeCS15 [112]
Christophe Varnier	BoucherBVBL97 [79], BaptisteLV92 [31]
Gérard Verfaillie	VerfaillieL01 [420], BensanaLV99 [59]
Ruixin Wang	WangB23 [437], WangB20 [436]
Jean-Paul Watson	BeckFW11 [43], WatsonB08 [439]
Christophe Wolinski	WolinskiKG04 [445], KuchcinskiW03 [247]
Farouk Yalaoui	OujanaAYB22 [332], ArbaouiY18 [13]
Neil Yorke-Smith	EfthymiouY23 [126], WallaceY20 [435]
Ziyan Zhao	LiFJZLL22 [262], ZhangJZL22 [457]
Jianyang Zhou	Zhou97 [462], Zhou96 [461]
Willem-Jan van Hoeve	GilesH16 [164], GoelSHFS15 [169]
Menkes van den Briel	LimHTB16 [265], LimBTBB15 [266]
Peter van Beek	BegB13 [45], MalikMB08 [291]
Florian A. Herzog	KoehlerBFFHPSSS21 [234]
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Kennedy A. G. Araújo	AbreuAPNM21 [108]
Younes Aalian	AalianPG23 [1]
Hanaa Abohashima	AbohashimaEG21 [2]
Montserrat Abril	AbrilSB05 [3]
Rodrigo Acuna-Agost	Acuna-AgostMFG09 [4]
W. Adelman	EscobetPQPRA19 [130]
Michael Affenzeller	abs-1902-09244 [187]
Abderrahmane Aggoun	AggounB93 [5]
Penélope Aguiar-Melgarejo	MelgarejoLS15 [6]
Sanjay Ahire	KanetAG04 [225]
Aftab Ahmed Shaikh	ShaikhK23 [379]
Uwe Aickelin	abs-2211-14492 [392]
Mohsen Akbarpour Shirazi	ZarandiKS16 [454]
Arianna Alfieri	AlfieriGPS23 [9]
S. Ali Torabi	FarsiTM22 [137]
Samira Alizdeh	AlizdehS20 [10]
Hassane Alla	LopezAKYG00 [281]
Lionel Amodeo	OujanaAYB22 [332]
Alexandru Andrei	RuggieroBBMA09 [364]
Ola Angelsmark	AngelsmarkJ00 [11]
M. Anton Ertl	ErtlK91 [129]
Zbigniew Antoni Banaszak	BocewiczBB09 [65]
Valentin Antuori	AntuoriHHEN21 [12]
Marlene Arangú	GarridoAO09 [150]
Taha Arbaoui	ArbaouiY18 [13]
Martin Aronsson	AronssonBK09 [16]
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Konstantin Artiouchine	ArtiouchineB05 [19]
Arezoo Atighehchian	YounespourAKE19 [448]
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Emrah B. Edis	EdisO11 [125]
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David B. H. Tay	Tay92 [402]
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Irena Bach	BocewiczBB09 [65]
Astrid Bachelu	BoucherBVBL97 [79]

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Scott Backhaus	LimBTBB15 [266]
Naderi, Bahman	NaderiRR23 [313]
Hari Balasubramanian	ShinBBHO18 [381]
Viet Bang Nguyen	LauLN08 [257]
Federico Barber	AbrilSB05 [3]
Ada Barlatt	BarlattCG08 [32]
Mohammadreza Barzegaran	BarzegaranZP20 [41]
Virginie Basini	Polo-MejiaALB20 [346]
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N Beldiceanu	BeldiceanuC94 [48]
Said Belhadji	BelhadjiI98 [53]
Sana Belmokhtar	ArtiguesBF04 [17]
Fatima Benbouzid-Si Tayeb	TouatBT22 [410]
Till Bender	BenderWS21 [54]
Belaid Benhamou	TouatBT22 [410]
Hachemi Bennaceur	KhemmoudjPB06 [230]
E. Bensana	BensanaLV99 [59]
Russell Bent	LimBTBB15 [266]
Timo Berthold	BertholdHLMS10 [60]
Christian Bessiere	BessiereHMQW14 [61]
Arthur Bit-Monnot	Bit-Monnot23 [63]
Jacek Blazewicz	BlazewiczEP19 [64]
Christian Blum	ThiruvadyBME09 [406]
Grzegorz Bocewicz	BocewiczBB09 [65]
Markus Bohlin	AronssonBK09 [16]
Nicolas Bonifas	BaptisteB18 [27]
Eric Boucher	BoucherBVBL97 [79]
Raphaël Boudreault	BoudreaultSLQ22 [80]
Jean-Louis Bouquard	LorigeonBB02 [282]
Eric Bourreau	BourreauGGLT22 [81]
Silvia Breitinger	BreitingerL95 [82]
Kristen Brent Venable	GelainPRVW17 [162]
D. Brodart	OujanaAYB22 [332]
Yuriy Brun	ShinBBHO18 [381]
Vittorio Brusoni	BrusoniCLMMT96 [85]
Josef Bürgler	KoehlerBFFHPSSS21 [234]
Cristina C. B. Cavalcante	HeipckeCCS00 [198]
Lionel C. Briand	AlesioNBG14 [119]
Eugene C. Freuder	CarchraeBF05 [90]
Kevin C. Furman	GoelSHFS15 [169]
Joseph C. Pemberton	PembertonG98 [338]
Hendrik C. R. Lock	BreitingerL95 [82]
Louis-Pierre Campeau	CampeauG22 [88]
Tom Carchrae	CarchraeBF05 [90]
Cid Carvalho de Souza	LopesCSM10 [280]
Yves Caseau	Caseau97 [91]
Yao-Ting Chang	HoYCLLCLC18 [203]
Nicolas Chapados	ChapadosJR11 [94]
Mohammad Cherkaoui	FallahiAC20 [135]
Han-Mo Chiu	HoYCLLCLC18 [203]
Yeonjun Choi	KimCMLLP23 [231]
Geoffrey Chu	SchuttCSW12 [371]
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Sue-Min Chu	HoYCLLCLC18 [203]
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Jordi Coll Caballero	Caballero23 [87]
Jordi Coll	BofillCSV17 [66]
Luca Console	BrusoniCLMMT96 [85]
E Contejean	BeldiceanuC94 [48]
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Cemalettin Öztürk	OzturkTHO13 [333]
Nahum Álvarez	PovedaAA23 [349]
Seán Óg Murphy	MurphyMB15 [311]
Gizem Çakir	SubulanC22 [391]

5 Problem Classification

Table 9: 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 generalized 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 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.

6.1 Concept Type Concepts

Table 10: Works for Concepts of Type Concepts

Type	Keyword	High	Medium	Low
Concepts	Allen's algebra			
Concepts	BOM	SubulanC22 [391]		abs-1902-01193 [8]
Concepts	activity	TardivoDFMP23 [399], AalianPG23 [1], PovedaAA23 [349], TouatBT22 [410], CampeauG22 [88], SubulanC22 [391], SvancaraB22 [395], BenderWS21 [54], KlankeBYE21 [232], HubnerGSV21 [211], BadicaBI20 [24], ZouZ20 [467], Polo-MejiaALB20 [346], AstrandJZ20 [23], BadicaBIL19 [25], abs-1902-09244 [187], abs-1911-04766 [158], GeibingerMM19 [159], MurinR19 [310], YounespourAKE19 [448], LaborieRSV18 [252], GokgurHO18 [170], BorghesiBLMB18 [78], TangLWSK18 [398], AstrandJZ18 [22], CappartS17 [89], Pralet17 [350], KreterSS17 [246], LiuCGM17 [270]... (Total: 113)	YuraszeckMCCR23 [453], Bit-Monnot23 [63], BoudreaultSLQ22 [80], PopovicCGNC22 [347], LunardiBLRV20 [283], YangSS19 [447], EscobetPQPRA19 [130], Novas19 [322], ShinBBHO18 [381], SchuttS16 [376], BoothNB16 [77], VilimLS15 [430], GoelSHFS15 [169], DoulabiRP14 [123], LombardiM13 [279], BonfiettiM12 [75], ChapadosJR11 [94], ZibranR11 [465], SchuttFSW09 [374], PoderB08 [343], GarridoOS08 [151], KrogtLPHJ07 [417], Simonis07 [387], KhayatLR06 [229], Geske05 [163], MoffittPP05 [300], DannaP03 [104], Bartak02 [34], KamarainenS02 [219]... (Total: 33)	PrataAN23 [352], CzerniachowskaWZ23 [103], ShaikhK23 [379], abs-2312-13682 [340], SquillaciPR23 [390], abs-2305-19888 [197], PerezGSL23 [339], HeinzNVH22 [196], PohlAK22 [345], abs-2211-14492 [392], OuelletQ22 [331], MullerMKP22 [309], YunusogluY22 [450], ZhangYW21 [458], HillTV21 [202], GeibingerMM21 [160], PandeyS21a [334], Astrand0F21 [21], QinDCS20 [355], Mercier-AubinGQ20 [299], SacramentoSP20 [365], NishikawaSTT19 [320], abs-1902-01193 [8], Tom19 [408], GalleguillosKSB19 [148], NishikawaSTT18 [318], NishikawaSTT18a [319], DemirovicS18 [115], MossigeGSMC17 [306]... (Total: 67)
Concepts	batch process	LacknerMMWW23 [254], LacknerMMWW21 [253], QinWSLS21 [354], NovaraNH16 [321], KoschB14 [237]	TangB20 [397], NovasH10 [323], Vilim02 [421], SimonisC95 [388]	PrataAN23 [352], IsikYA23 [213], YuraszeckMCCR23 [453], YunusogluY22 [450], MullerMKP22 [309], SvancaraB22 [395], OujanaAYB22 [332], LuoB22 [285], LiFJZLL22 [262], ColT22 [101], AbreuN22 [109], GeitzGSSW22 [161], FanXG21 [136], ZhangYW21 [458], KlankeBYE21 [232], MengZRZL20 [298], EscobetPQPRA19 [130], Ham18 [184], FahimiOQ18 [133], LaborieRSV18 [252], CauwelaertDMS16 [92], GrimesH10 [174], Simonis07 [387], VilimBC05 [429], ArtiguesBF04 [17], Vilim04 [423]
Concepts	bill of material			Simonis07 [387]
Concepts	buffer-capacity		SureshMOK06 [394]	LiFJZLL22 [262], OujanaAYB22 [332], RiahiNS018 [359], BonfiettiLBM14 [72], NovasH14 [325], ZeballosH05 [455]
Concepts	cmax	JuvinHHL23 [217], YuraszeckMCCR23 [453], AbreuNP23 [110], YuraszeckMC23 [451], KameugneFND23 [222], NaderiRR23 [313], abs-2305-19888 [197], IsikYA23 [213], YunusogluY22 [450], FetgoD22 [139], AbreuN22 [109], abs-2211-14492 [392], QinWSLS21 [354], AbohashimaEG21 [2], ArmstrongGOS21 [14], Polo-MejiaALB20 [346], QinDCS20 [355], MejiaY20 [296], MengZRZL20 [298], GodetLHS20 [168], WikarekS19 [441], YounespourAKE19 [448], MalapertN19 [289], Ham18 [184], GedikKEK18 [156], KameugneFGOQ18 [221], VilimLS15 [430], OzturkTHO13 [333], BillautHL12 [62]... (Total: 37)	Mehdizadeh-Somarin23 [295], BoudreaultSLQ22 [80], MullerMKP22 [309], ArmstrongGOS22 [15], HamPK21 [185], AbreuAPNM21 [108], ParkUJR19 [337], Novas19 [322], ArbaouiY18 [13], WangMD15 [438], ZhouGL15 [463], ZhangLS12 [460], BeckFW11 [43], BartakSR10 [38], MoffittPP05 [300], Muscettola02 [312], ArtiguesR00 [18], SourdN00 [389]	JuvinHL23 [218], Teppan22 [403], ZhangYW21 [458], HanenKP21 [186], HubnerGSV21 [211], GokgurHO18 [170], LiuCGM17 [270], BofillCSV17 [66], SialaAH15 [383], KoschB14 [237], WatsonB08 [439], LiessM08 [263], AkkerDH07 [415], KeriK07 [228], KhayatLR06 [229], BaptisteP00 [30], FocacciLN00 [140]

Table 10: Works for Concepts of Type Concepts

Type	Keyword	High	Medium	Low
Concepts	completion-time	PrataAN23 [352], JuvinHL23 [218], AbreuNP23 [110], Mehdizadeh-Somarin23 [295], AlfieriGPS23 [9], NaderiRR23 [313], KameugneFND23 [222], YuraszeckMPV22 [452], AbreuN22 [109], YunusogluY22 [450], SubulanC22 [391], OuelletQ22 [331], FetgoD22 [139], KlankeBYE21 [232], Bedhief21 [44], ArmstrongGOS21 [14], MejiaY20 [296], LunardiBLRV20 [283], QinDCS20 [355], YounespourAKE19 [448], FahimiOQ18 [133], RiahiNS018 [359], ZhangW18 [459], ArbaouiY18 [13], GedikKEK18 [156], KameugneFGOQ18 [221], GingrasQ16 [165], DejemeppeCS15 [112], ZhouGL15 [463]... (Total: 51)	CzerniachowskaWZ23 [103], abs-2305-19888 [197], MullerMKP22 [309], ColT22 [101], Teppan22 [403], TouatBT22 [410], OujanaAYB22 [332], HeinzNVH22 [196], abs-2211-14492 [392], LiFJZLL22 [262], AbreuAPNM21 [108], HanenKP21 [186], FanXG21 [136], GeibingerMM21 [160], QinWSLS21 [354], NattafM20 [316], Mercier-AubinGQ20 [299], Polo-MejiaALB20 [346], YangSS19 [447], abs-1902-09244 [187], BogaerdtW19 [416], abs-1911-04766 [158], MalapertN19 [289], GeibingerMM19 [159], ParkUJR19 [337], Ham18 [184], OuelletQ18 [330], KreterSS17 [246], CappartS17 [89]... (Total: 53)	abs-2402-00459 [317], TasselGS23 [400], MontemanniD23a [304], AkramNHRSA23 [7], IsikYA23 [213], abs-2306-05747 [401], PerezGSL23 [339], JuvinHHL23 [217], PopovicCGNC22 [347], PohlAK22 [345], GeitzGSSW22 [161], CampeauG22 [88], ZhangJZL22 [457], WinterMMW22 [442], ArmstrongGOS22 [15], HubnerGSV21 [211], VlkHT21 [432], PandeyS21a [334], HamPK21 [185], WessenCS20 [440], BadicaBI20 [24], MengZRZL20 [298], MokhtarzadehTNF20 [301], GodetLHS20 [168], SacramentoSP20 [365], ZouZ20 [467], AstrandJZ20 [23], BadicaBIL19 [25], Novas19 [322]... (Total: 82)
Concepts	continuous-process			GaySS14 [155], Bartak02 [34], SimonisC95 [388]
Concepts	distributed	PrataAN23 [352], NaderiRR23 [313], MengZRZL20 [298], He0GLW18 [188], BridiLBBM16 [84], BridiBLMB16 [83], ZhouGL15 [463], BonfiettiLM14 [74], BartakS11 [37], BartakSR10 [38], RuggieroBBMA09 [364], HoeveGSL07 [418], RossiTHP07 [363], SureshMOK06 [394], GomesHS06 [173], Geske05 [163], LammaMM97 [256]	IsikYA23 [213], ShaikhK23 [379], AbreuNP23 [110], OujanaAYB22 [332], JungblutK22 [216], AbreuN22 [109], YuraszeckMPV22 [452], AbreuAPNM21 [108], MokhtarzadehTNF20 [301], ZouZ20 [467], NishikawaSTT19 [320], BorghesiBLMB18 [78], ZhangW18 [459], ZarandiKS16 [454], AlesioNBG14 [119], BegB13 [45], HermenierDL11 [201], LopesCSM10 [280], SunLYL10 [393], BeniniBGM06 [57], ZhuS02 [464], SchildW00 [370], Wallace96 [434]	YuraszeckMC23 [451], KimCMLLP23 [231], Bit-Monnot23 [63], AlfieriGPS23 [9], MontemanniD23 [305], abs-2305-19888 [197], SquillaciPR23 [390], GurPAE23 [182], AkramNHRSA23 [7], abs-2211-14492 [392], HeinzNVH22 [196], TouatBT22 [410], BoudreaultSLQ22 [80], Teppan22 [403], ColT22 [101], LiFJZLL22 [262], WinterMMW22 [442], HamPK21 [185], GeibingerKKMMM21 [157], PandeyS21a [334], FanXG21 [136], BenderWS21 [54], KovacsTKSG21 [244], ZhangYW21 [458], VlkHT21 [432], SacramentoSP20 [365], GroleazNS20a [178], BarzegaranZP20 [41], WangB20 [436]... (Total: 96)
Concepts	due-date	OujanaAYB22 [332], ColT22 [101], FanXG21 [136], AntuoriHHEN21 [12], TangB20 [397], Mercier-AubinGQ20 [299], abs-1902-09244 [187], Novas19 [322], abs-1911-04766 [158], Tesch18 [405], GoldwaserS17 [171], NovaraNH16 [321], DoulabiRP14 [123], KoschB14 [237], HoundjiSWD14 [210], LimtanyakulS12 [268], KelbelH11 [227], NovasH10 [323], ZeballosQH10 [456], BartakSR10 [38], MonetteDH09 [303], Simonis07 [387], KrogtLPHJ07 [417], Hooker06 [207], Sadykov04 [366], PapaB98 [336], Zhou97 [462], Zhou96 [461], Colombani96 [102]	PrataAN23 [352], LacknerMMWW23 [254], IsikYA23 [213], NaderiRR23 [313], YunusogluY22 [450], abs-2211-14492 [392], WinterMMW22 [442], LacknerMMWW21 [253], GeibingerMM21 [160], GroleazNS20a [178], GeibingerMM19 [159], FahimiOQ18 [133], ZarandiKS16 [454], GrimesIOS14 [177], HeinzSB13 [195], GrimesH11 [175], LombardiM10a [275], MakMS10 [288], SchuttW10 [377], Davenport10 [106], ThiruvadyBME09 [406], abs-0907-0939 [342], MouraSCL08a [307], Limtanyakul07 [267], SadykovW06 [367], Hooker05a [206], ZeballosH05 [455], ChuX05 [95], QuirogaZH05 [357]... (Total: 33)	abs-2402-00459 [317], YuraszeckMC23 [451], KimCMLLP23 [231], JuvinHHL23 [217], ZhangJZL22 [457], SubulanC22 [391], TouatBT22 [410], YuraszeckMPV22 [452], MullerMKP22 [309], KlankeBYE21 [232], HubnerGSV21 [211], Bedhief21 [44], KovacsTKSG21 [244], VlkHT21 [432], HanenKP21 [186], LunardiBLRV20 [283], MejiaY20 [296], Polo-MejiaALB20 [346], GroleazNS20 [179], AstrandJZ20 [23], ParkUJR19 [337], EscobetPQPRA19 [130], GokgurHO18 [170], GedikKEK18 [156], LaborieRSV18 [252], Laborie18a [251], Ham18 [184], Pralet17 [350], Hooker17 [208]... (Total: 62)
Concepts	earliness	PrataAN23 [352], KimCMLLP23 [231], TouatBT22 [410], PohlAK22 [345], abs-1902-09244 [187], LaborieRSV18 [252], ZarandiKS16 [454], LombardiM12 [278], KelbelH11 [227], GrimesH11 [175], Laborie09 [250], MonetteDH09 [303], KeriK07 [228], DannaP03 [104]	MengZRZL20 [298], KovacsB11 [239], Davenport10 [106]	abs-2402-00459 [317], NaderiRR23 [313], AbreuNP23 [110], IsikYA23 [213], AlfieriGPS23 [9], LacknerMMWW23 [254], YunusogluY22 [450], FanXG21 [136], LacknerMMWW21 [253], Polo-MejiaALB20 [346], Mercier-AubinGQ20 [299], ColT19 [100], GokgurHO18 [170], ZhangW18 [459], NovaraNH16 [321], VilimLS15 [430], LimBTBB15 [266], SialaAH15 [383], HeinzB12 [191], EdisO11 [125], KovacsK11 [241], ZeballosQH10 [456], NovasH10 [323], KovacsV06 [243], GodardLN05 [166], QuirogaZH05 [357], Bartak02a [33], KamarainenS02 [219], Bartak02 [34], ArtiguesR00 [18]

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Table 10: Works for Concepts of Type Concepts

Type	Keyword	High	Medium	Low
Concepts	flow-shop	PrataAN23 [352], CzerniachowskaWZ23 [103], NaderiRR23 [313], AlfieriGPS23 [9], IsikYA23 [213], JuvinHL23 [218], AbreuNP23 [110], ArmstrongGOS22 [15], OujanaAYB22 [332], ColT22 [101], ZhangJZL22 [457], AbreuN22 [109], LiFJZLL22 [262], QinWSLS21 [354], ArmstrongGOS21 [14], Bedhief21 [44], AbreuAPNM21 [108], MengZRZL20 [298], AstrandJZ20 [23], Novas19 [322], ParkUJR19 [337], ZhangW18 [459], ZhouGL15 [463], LorigeonBB02 [282], SourdN00 [389]	Mehdizadeh-Somarin23 [295], YuraszeckMPV22 [452], KoehlerBFFHPSSS21 [234], FanXG21 [136], TangB20 [397], abs-1902-09244 [187], LaborieRSV18 [252], GrimesH11 [175], KovacsB11 [239], BartakSR10 [38], AggounB93 [5]	TasselGS23 [400], AalianPG23 [1], YuraszeckMCCR23 [453], abs-2305-19888 [197], JuvinHHL23 [217], abs-2306-05747 [401], abs-2211-14492 [392], TouatBT22 [410], HeinzNVH22 [196], Teppan22 [403], LacknerMMWW21 [253], HillTV21 [202], abs-2102-08778 [99], KovacsTKSG21 [244], PandeyS21a [334], HamPK21 [185], WallaceY20 [435], SacramentoSP20 [365], LunardiBLRV20 [283], WikarekS19 [441], RiahiNS018 [359], GokgurHO18 [170], ZarandiKS16 [454], OzturkTHO13 [333], LombardiM12 [278], BillautHL12 [62], KovacsK11 [241], BartakCS10 [36], GrimesH10 [174]... (Total: 39)
Concepts	flow-time	YuraszeckMPV22 [452], FanXG21 [136], NattafM20 [316], MalapertN19 [289], ZhangW18 [459]	PrataAN23 [352], AlfieriGPS23 [9], YunusogluY22 [450]	TasselGS23 [400], abs-2306-05747 [401], YuraszeckMC23 [451], YuraszeckMCCR23 [453], LiFJZLL22 [262], AbreuN22 [109], KoehlerBFFHPSSS21 [234], MengZRZL20 [298], ParkUJR19 [337], Novas19 [322], KovacsB11 [239], EdisO11 [125], QuirogaZH05 [357]
Concepts	inventory	SubulanC22 [391], GilesH16 [164], GoelSHFS15 [169], SerraNM12 [378], LopesCSM10 [280], RossiTHP07 [363], Timpe02 [407], BeckDF97 [42]	Novas19 [322], MakMS10 [288], LauLN08 [257], MouraSCL08a [307], DavenportKRSH07 [107], GarganiR07 [149]	PrataAN23 [352], PerezGSL23 [339], abs-2312-13682 [340], AlfieriGPS23 [9], GurPAE23 [182], AbreuN22 [109], PohlAK22 [345], YunusogluY22 [450], HubnerGSV21 [211], KovacsTKSG21 [244], GroleazNS20a [178], GroleazNS20 [179], abs-1902-09244 [187], YounespourAKE19 [448], WikarekS19 [441], Ham18 [184], LaborieRSV18 [252], ShinBBHO18 [381], SchuttS16 [376], SimoninAHL15 [385], HoundjiSWD14 [210], KelarevaTK13 [226], HeinzSSW12 [193], LombardiM12 [278], KelbelH11 [227], Laborie09 [250], MouraSCL08 [308], KrogtLPHJ07 [417], QuirogaZH05 [357], SimonisC95 [388]
Concepts	job	PrataAN23 [352], abs-2402-00459 [317], KimCMLLP23 [231], JuvinHHL23 [217], AlfieriGPS23 [9], YuraszeckMC23 [451], AbreuNP23 [110], IsikYA23 [213], WangB23 [437], LacknerMMWW23 [254], Bit-Monnot23 [63], CzerniachowskaWZ23 [103], abs-2306-05747 [401], NaderiRR23 [313], JuvinHL23 [218], TasselGS23 [400], Mehdizadeh-Somarin23 [295], YuraszeckMCCR23 [453], LiFJZLL22 [262], TouatBT22 [410], YunusogluY22 [450], GeitzGSSW22 [161], MullerMKP22 [309], WinterMMW22 [442], ArmstrongGOS22 [15], OujanaAYB22 [332], AbreuN22 [109], ZhangJZL22 [457], abs-2211-14492 [392]... (Total: 172)	EfthymiouY23 [126], ShaikhK23 [379], abs-2305-19888 [197], HeinzNVH22 [196], BourreauGGLT22 [81], LuoB22 [285], HanenKP21 [186], Mercier-AubinGQ20 [299], MokhtarzadehTNF20 [301], Tom19 [408], EscobetPQPRA19 [130], GurEA19 [468], PourDERB18 [348], CappartS17 [89], NattafAL17 [315], ZarandiKS16 [454], Madi-WambaB16 [286], LetortCB15 [261], ZhouGL15 [463], PraletLJ15 [351], BonfiettiLBM14 [72], BonfiettiLM14 [74], LombardiM12 [278], KovacsK11 [241], Rodriguez07 [362], Simonis07 [387], KovacsV06 [243], Hooker06 [207], SureshMOK06 [394]... (Total: 39)	PovedaAA23 [349], CampeauG22 [88], PohlAK22 [345], KlankeBYE21 [232], HubnerGSV21 [211], AntuoriHHEN21 [12], BenderWS21 [54], WessenCS20 [440], QinDCS20 [355], Polo-MejiaALB20 [346], FrimodigS19 [145], TangLWSK18 [398], HoYCLLCLC18 [203], BaptisteB18 [27], ShinBBHO18 [381], HechingH16 [190], NovaraNH16 [321], BurtLPS15 [86], WangMD15 [438], LimBTBB15 [266], BartakV15 [39], LombardiBM15 [272], MelgarejoLS15 [6], BessiereHMQW14 [61], DerrienPZ14 [118], KameugneFSN14 [224], AlesioNBG14 [119], BonfiettiLM13 [73], BonfiettiM12 [75]... (Total: 66)

Type	Keyword	High	Medium	Low
Concepts	job-shop	abs-2402-00459 [317], PrataAN23 [352], abs-2306-05747 [401], Mehdizadeh-Somarin23 [295], KimCMLLP23 [231], CzerniachowskaWZ23 [103], JuvinHHL23 [217], Bit-Monnot23 [63], NaderiRR23 [313], AbreuNP23 [110], YuraszeckMCCR23 [453], TasselGS23 [400], MullerMKP22 [309], Teppan22 [403], OujanaAYB22 [332], abs-2211-14492 [392], YuraszeckMPV22 [452], LiFJZLL22 [262], GeitzGSSW22 [161], ColT22 [101], HamPK21 [185], KovacsTKSG21 [244], abs-2102-08778 [99], AbreuAPNM21 [108], FanXG21 [136], ZhangYW21 [458], MengZRZL20 [298], LunardiBLRV20 [283], AstrandJZ20 [23]... (Total: 77)	IsikYA23 [213], EfthymiouY23 [126], AlfieriGPS23 [9], TouatBT22 [410], YunusogluY22 [450], AbreuN22 [109], LuoB22 [285], QinWSLS21 [354], ArmstrongGOS21 [14], Astrand0F21 [21], KoehlerBFFHPSSS21 [234], GroleazNS20 [179], MejiaY20 [296], SacramentoSP20 [365], EscobetPQPRA19 [130], WikarekS19 [441], GokgurHO18 [170], MossigeGSMC17 [306], CappartS17 [89], BonfiettiLM14 [74], GaySS14 [155], BonfiettiLBM14 [72], LombardiM12 [278], AronssonBK09 [16], LauLN08 [257], KovacsV06 [243], VilimBC05 [429], HebrardTW05 [189], Geske05 [163]... (Total: 37)	ShaikhK23 [379], YuraszeckMC23 [451], PovedaAA23 [349], LacknerMMWW23 [254], JuvinHL23 [218], HanenKP21 [186], KlankeBYE21 [232], AntuoriHHEN21 [12], BenediktMH20 [55], WessenCS20 [440], Mercier-AubinGQ20 [299], WallaceY20 [435], Tom19 [408], GurEA19 [468], FrimodigS19 [145], BogaerdtW19 [416], abs-1902-09244 [187], ParkUJR19 [337], BenediktSMVH18 [56], Ham18 [184], ZarandiKS16 [454], PraletLJ15 [351], LimBTBB15 [266], BartakV15 [39], LombardiBM15 [272], ZhouGL15 [463], WangMD15 [438], BurtLPS15 [86], KameugneFSN14 [224]... (Total: 73)
Concepts	lateness	FahimiOQ18 [133], KoschB14 [237], BartakSR10 [38], Geske05 [163], ArtiguesR00 [18]	PrataAN23 [352], PohlAK22 [345], ZhangW18 [459], AkkerDH07 [415], Sadykov04 [366]	LacknerMMWW23 [254], YunusogluY22 [450], GeitzGSSW22 [161], ColT22 [101], KoehlerBFFHPSSS21 [234], HanenKP21 [186], QinWSLS21 [354], LacknerMMWW21 [253], Novas19 [322], ParkUJR19 [337], Tesch18 [405], BartakV15 [39], EdisO11 [125], NovasH10 [323], SadykovW06 [367], Bartak02 [34]
Concepts	lazy clause generation	KreterSS17 [246], KreterSS15 [245], SchuttFS13 [373], KelarevaTK13 [226], SchuttFS13a [372], SchuttFSW11 [375], SchuttFSW09 [374]	PovedaAA23 [349], Bit-Monnot23 [63], BoudreaultSLQ22 [80], GeitzGSSW22 [161], OuelletQ22 [331], FahimiOQ18 [133], SchuttS16 [376], SzerediS16 [396], SialaAH15 [383], BofillEGPSV14 [67], GuSS13 [181], SchuttCSW12 [371]	WangB23 [437], TardivoDFMP23 [399], KameugneFND23 [222], FetgoD22 [139], GeibingerMM21 [160], HillTV21 [202], GodetLHS20 [168], WallaceY20 [435], Mercier-AubinGQ20 [299], YangSS19 [447], BaptisteB18 [27], YoungFS17 [449], BofillCSV17 [66], GoldwaserS17 [171], PesantRR15 [341], LombardiM12 [278], GrimesH11 [175], SchuttW10 [377]
Concepts	machine	abs-2402-00459 [317], PrataAN23 [352], IsikYA23 [213], CzerniachowskaWZ23 [103], YuraszeckMCCR23 [453], AbreuNP23 [110], NaderiRR23 [313], TasselGS23 [400], Mehdizadeh-Somarin23 [295], AalianPG23 [1], JuvinHL23 [218], PerezGSL23 [339], JuvinHHL23 [217], abs-2312-13682 [340], LacknerMMWW23 [254], EfthymiouY23 [126], abs-2306-05747 [401], AlfieriGPS23 [9], YuraszeckMC23 [451], abs-2305-19888 [197], KimCMLLP23 [231], LiFJZLL22 [262], ArmstrongGOS22 [15], JungblutK22 [216], abs-2211-14492 [392], GeitzGSSW22 [161], YuraszeckMPV22 [452], ZhangJZL22 [457], AbreuN22 [109]... (Total: 166)	Bit-Monnot23 [63], AkramNHRSA23 [7], GurPAE23 [182], LuoB22 [285], HillTV21 [202], KlankeBYE21 [232], AbohashimaEG21 [2], Polo-MejiaALB22 [346], BehrensLM19 [46], BaptisteB18 [27], He0GLW18 [188], Ham18 [184], ShinBBHO18 [381], FahimiOQ18 [133], GoldwaserS17 [171], KreterSS17 [246], Pralet17 [350], BridiLBBM16 [84], SchuttS16 [376], CauwelaertDMS16 [92], ZarandiKS16 [454], SialaAH15 [383], DejemeppeCS15 [112], MurphyMB15 [311], GaySS14 [155], BonfiettiLBM14 [72], LombardiM12 [278], BonfiettiLBM12 [71], BeniniLMR11 [58]... (Total: 43)	KameugneFND23 [222], MontemanniD23 [305], ShaikhK23 [379], BoudreaultSLQ22 [80], PopovicCGNC22 [347], SubulanC22 [391], PohlAK22 [345], GeibingerMM21 [160], WallaceY20 [435], WangB20 [436], BarzegaranZP20 [41], Mercier-AubinGQ20 [299], YangSS19 [447], BadicaBIL19 [25], NishikawaSTT19 [320], Tom19 [408], YounespourAKE19 [448], HoYCLLCLC18 [203], PourDERB18 [348], Laborie18a [251], BofillCSV17 [66], CappartS17 [89], KletzanderM17 [233], YoungFS17 [449], LiuCGM17 [270], LimHTB16 [265], NovaraNH16 [321], SzerediS16 [396], DoulabiRP16 [124]... (Total: 97)
Concepts	make to order			OujanaAYB22 [332], DavenportKRSH07 [107], Simonis07 [387]
Concepts	make to stock			

Table 10: Works for Concepts of Type Concepts

Type	Keyword	High	Medium	Low
Concepts	make-span	PrataAN23 [352], JuvinHL23 [218], AbreuNP23 [110], EfthymiouY23 [126], PovedaAA23 [349], AlfieriGPS23 [9], abs-2305-19888 [197], NaderiRR23 [313], TasselGS23 [400], Bit-Monnot23 [63], abs-2306-05747 [401], AalianPG23 [1], CzerniachowskaWZ23 [103], LacknerMMWW23 [254], JuvinHHL23 [217], YuraszeckMC23 [451], IsikYA23 [213], Mehdizadeh-Somarin23 [295], HeinzNVH22 [196], AbreuN22 [109], GeitzGSSW22 [161], BoudreaultSLQ22 [80], YunusogluY22 [450], SubulanC22 [391], ArmstrongGOS22 [15], TouatBT22 [410], ColT22 [101], KlankeBYE21 [232], AbreuAPNM21 [108]... (Total: 125)	YuraszeckMCCR23 [453], abs-2312-13682 [340], PerezGSL23 [339], KameugneFND23 [222], MullerMKP22 [309], SvancaraB22 [395], OujanaAYB22 [332], ZhangJZL22 [457], abs-2211-14492 [392], YuraszeckMPV22 [452], LiFJZLL22 [262], PandeyS21a [334], FanXG21 [136], QinDCS20 [355], AstrandJZ18 [22], KreterSS17 [246], YoungFS17 [449], BonfiettiZLM16 [76], GingrasQ16 [165], SialaAH15 [383], DejemeppeCS15 [112], GayHLS15 [152], BonfiettiLBM14 [72], KameugneFSN14 [224], GuSS13 [181], LombardiM12 [278], BillautHL12 [62], SchuttCSW12 [371], TrojetHL11 [412]... (Total: 42)	KimCMLLP23 [231], TardivoDFMP23 [399], Teppan22 [403], PopovicCGNC22 [347], CampeauG22 [88], JungblutK22 [216], FetgoD22 [139], HanenKP21 [186], KoehlerBFFHPSSS21 [234], HubnerGSV21 [211], Mercier-AubinGQ20 [299], TangB20 [397], NattafM20 [316], SacramentoSP20 [365], NishikawaSTT19 [320], MurinR19 [310], abs-1911-04766 [158], BadicaBIL19 [25], Tom19 [408], GeibingerMM19 [159], NishikawaSTT18 [318], BorghesiBLMB18 [78], ArbaouiY18 [13], Ham18 [184], NishikawaSTT18a [319], OuelletQ18 [330], KameugneFGOQ18 [221], Tesch18 [405], NattafAL17 [315]... (Total: 80)
Concepts	manpower	NovaraNH16 [321]	LaborieRSV18 [252]	BourreauGGLT22 [81], BadicaBI20 [24], MokhtarzadehTNF20 [301], WikarekS19 [441], BaptisteB18 [27], SchuttS16 [376], HechingH16 [190], GayHS15a [154], GaySS14 [155], LombardiM12 [278], Vilim11 [427], NovasH10 [323], NuijtenP98 [327], SimonisC95 [388], Puget95 [353]
Concepts	multi-agent	SvancaraB22 [395], BehrensLM19 [46], He0GLW18 [188], HoeveGSL07 [418]	MokhtarzadehTNF20 [301], abs-1901-07914 [47], LimHTB16 [265], BartakSR10 [38], BocewiczBB09 [65]	abs-2402-00459 [317], Mehdizadeh-Somarin23 [295], SquillaciPR23 [390], AbreuAPNM21 [108], ZhangYW21 [458], MejiaY20 [296], WessenCS20 [440], WikarekS19 [441], BadicaBIL19 [25], ZhangW18 [459], LimBTBB15 [266], KoschB14 [237], BartakS11 [37], GomesHS06 [173], AbrilSB05 [3], Wallace96 [434]
Concepts	no preempt			ColT22 [101], TouatBT22 [410], FanXG21 [136], Bedhief21 [44], MengZRZL20 [298], ParkUJR19 [337], MonetteDD07 [302], ArtiguesR00 [18]
Concepts	open-shop	PrataAN23 [352], Bit-Monnot23 [63], AbreuNP23 [110], NaderiRR23 [313], YuraszeckMPV22 [452], AbreuN22 [109], AbreuAPNM21 [108], MejiaY20 [296], FahimiOQ18 [133], GrimesHM09 [176], MonetteDD07 [302], LorigeonBB02 [282], FocacciLN00 [140]	SacramentoSP20 [365], MengZRZL20 [298], GrimesH10 [174], Vilim05 [424]	YuraszeckMCCR23 [453], YuraszeckMC23 [451], KimCMLLP23 [231], ShaikhK23 [379], OujanaAYB22 [332], ColT22 [101], Astrand0F21 [21], abs-2102-08778 [99], AstrandJZ20 [23], ParkUJR19 [337], SialaAH15 [383], BonfiettiLM14 [74], AlesioNBG14 [119], BillautHL12 [62], SchuttFSW11 [375], GrimesH11 [175], BartakSR10 [38], SchuttFSW09 [374], ThiruvadyBME09 [406], VilimBC05 [429], ArtiouchineB05 [19], HentenryckM04 [199], VilimBC04 [428], Vilim03 [422], ElkhyariGJ02a [128], VerfaillieL01 [420], SourdN00 [389]
Concepts	order	abs-2402-00459 [317], PrataAN23 [352], EfthymiouY23 [126], AbreuNP23 [110], AlfieriGPS23 [9], abs-2312-13682 [340], CzerniachowskaWZ23 [103], TasselGS23 [400], AalianPG23 [1], abs-2306-05747 [401], Bit-Monnot23 [63], JuvinHL23 [218], WangB23 [437], KameugneFND23 [222], LacknerMMWW23 [254], PerezGSL23 [339], JuvinHHL23 [217], SquillaciPR23 [390], IsikYA23 [213], YuraszeckMCCR23 [453], KimCMLLP23 [231], PovedaAA23 [349], PopovicCGNC22 [347], BoudreaultSLQ22 [80], LuoB22 [285], CampeauG22 [88], YunusogluY22 [450], AbreuN22 [109], BourreauGGLT22 [81]... (Total: 286)	MontemanniD23a [304], ShaikhK23 [379], abs-2305-19888 [197], NaderiRR23 [313], TardivoDFMP23 [399], YuraszeckMC23 [451], GurPAE23 [182], OuelletQ22 [331], SvancaraB22 [395], ArmstrongGOS22 [15], WinterMMW22 [442], HeinzNVH22 [196], JungblutK22 [216], TouatBT22 [410], BenderWS21 [54], GeibingerMM21 [160], HillTV21 [202], abs-2102-08778 [99], QinDCS20 [355], WallaceY20 [435], ZouZ20 [467], TangB20 [397], ColT19 [100], BogaerdtW19 [416], FrohnerTR19 [146], YounespourAKE19 [448], DemirovicS18 [115], ShinBBHO18 [381], BaptisteB18 [27]... (Total: 80)	MontemanniD23 [305], AkramNHRSA23 [7], Mehdizadeh-Somarin23 [295], ZhangJZL22 [457], AbohashimaEG21 [2], ZhangYW21 [458], MokhtarzadehTNF20 [301], KucukY19 [249], abs-1902-01193 [8], GalleguillosKSB19 [148], ArbaouiY18 [13], BenediktSMVH18 [56], He0GLW18 [188], Hooker17 [208], Bonfietti16 [69], SzerediS16 [396], HechingH16 [190], BridiLBBM16 [84], GayHS15a [154], DoulabiRP14 [123], GuSS13 [181], LombardiM13 [279], SchuttFS13 [373], BonfiettiLM13 [73], HeinzKB13 [192], HeinzB12 [191], BonfiettiLBM11 [70], ChapadosJR11 [94], SunLYL10 [393]... (Total: 52)

Table 10: Works for Concepts of Type Concepts

Type	Keyword	High	Medium	Low
Concepts	precedence	abs-2402-00459 [317], PovedaAA23 [349], YuraszeckMCCR23 [453], NaderiRR23 [313], IsikYA23 [213], AlfieriGPS23 [9], JuvinHHL23 [217], FetgoD22 [139], PohlAK22 [345], CampeauG22 [88], YunusogluY22 [450], BoudreaultSLQ22 [80], GeibingerMM21 [160], HamPK21 [185], HanenKP21 [186], Astrand0F21 [21], HillTV21 [202], KoehlerBFFHPSSS21 [234], FanXG21 [136], HubnerGSV21 [211], ArmstrongGOS21 [14], ZhangYW21 [458], GroleazNS20 [179], SacramentoSP20 [365], Polo-MejiaALB20 [346], AstrandJZ20 [23], Mercier-AubinGQ20 [299], LunardiBLRV20 [283], BadicaBI20 [24]... (Total: 116)	Bit-Monnot23 [63], KameugneFND23 [222], TardivoDFMP23 [399], OujanaAYB22 [332], SubulanC22 [391], ColT22 [101], VlkHT21 [432], AntuoriHHEN21 [12], WessenCS20 [440], MokhtarzadehTNF20 [301], QinDCS20 [355], GeibingerMM19 [159], Novas19 [322], abs-1911-04766 [158], ColT19 [100], BogaerdtW19 [416], MurinR19 [310], Ham18 [184], KameugneFGOQ18 [221], Madi-WambaLOBM17 [287], MossigeGSMC17 [306], Madi-WambaB16 [286], GayHLS15 [152], VilimLS15 [430], BurtLPS15 [86], LombardiBM15 [272], BartakV15 [39], WangMD15 [438], BonfiettiLM14 [74]... (Total: 60)	PrataAN23 [352], KimCMLLP23 [231], JuvinHL23 [218], TasselGS23 [400], abs-2305-19888 [197], Mehdizadeh-Somarin23 [295], abs-2306-05747 [401], YuraszeckMC23 [451], MullerMKP22 [309], WinterMMW22 [442], abs-2211-14492 [392], HeinzNVH22 [196], BourreauGGLT22 [81], ZhangJZL22 [457], GeitzGSSW22 [161], TouatBT22 [410], KovacsTKSG21 [244], PandeyS21a [334], AbreuAPNM21 [108], TangB20 [397], GroleazNS20a [178], BaptisteB18 [27], He0GLW18 [188], OuelletQ18 [330], GokgurHO18 [170], DemirovicS18 [115], CappartS17 [89], KreterSS17 [246], BoothNB16 [77]... (Total: 78)
Concepts	preempt	JuvinHHL23 [217], PovedaAA23 [349], SubulanC22 [391], HanenKP21 [186], Polo-MejiaALB20 [346], BaptisteB18 [27], GokgurHO18 [170], FahimiOQ18 [133], ZarandiKS16 [454], EvenSH15 [131], EvenSH15a [132], AlesioNBG14 [119], LombardiM12 [278], BeldiceanuCDP11 [50], KovacsB11 [239], BartakSR10 [38], MonetteDD07 [302], Wolf03 [443], BaptisteP00 [30], PapaB98 [336], PembertonG98 [338], BaptisteP97 [29]	PrataAN23 [352], abs-2305-19888 [197], OuelletQ22 [331], FetgoD22 [139], HeinzNVH22 [196], SacramentoSP20 [365], Mercier-AubinGQ20 [299], LunardiBLRV20 [283], YoungFS17 [449], NattafAL15 [314], SimoninAHL15 [385], OzturkTHO13 [333], SimoninAHL12 [384], SchuttFSW11 [375], SchuttFSW09 [374], Laborie09 [250], KovacsB08 [238], ArtiouchineB05 [19], SourdN00 [389], NuijtenP98 [327]	NaderiRR23 [313], TasselGS23 [400], AalianPG23 [1], TardivoDFMP23 [399], YuraszeckMC23 [451], YuraszeckMCCR23 [453], KameugneFND23 [222], AkramNHRSA23 [7], AbreuNP23 [110], abs-2306-05747 [401], IsikYA23 [213], Mehdizadeh-Somarin23 [295], AbreuN22 [109], TouatBT22 [410], Teppan22 [403], GeitzGSSW22 [161], BoudreaultSLQ22 [80], ColT22 [101], MullerMKP22 [309], YunusogluY22 [450], OujanaAYB22 [332], JungblutK22 [216], Bedhief21 [44], BenderWS21 [54], FanXG21 [136], QinWSLS21 [354], KovacsTKSG21 [244], HubnerGSV21 [211], ZhangYW21 [458]... (Total: 112)
Concepts	producer/consumer	SchuttS16 [376], PoderBS04 [344], Kumar03 [248], SimonisC95 [388]	HermenierDL11 [201], BeldiceanuC02 [49]	GeitzGSSW22 [161], KlankeBYE21 [232], LombardiM12a [277], PoderB08 [343], Simonis07 [387], Timpe02 [407], Simonis95 [386]
Concepts	re-scheduling	HamPK21 [185], BarzegaranZP20 [41], ZhangW18 [459], Madi-WambaLOBM17 [287], CappartS17 [89], BartakV15 [39], GrimesIOS14 [177], RendlPHPR12 [358], LombardiM12 [278], IfrimOS12 [212], NovasH10 [323], MartinPY01 [293], ArtiguesR00 [18]	Mehdizadeh-Somarin23 [295], KovacsTKSG21 [244], AstrandJZ20 [23], HoYCLLCLC18 [203], LimHTB16 [265], LimBTBB15 [266], CobanH10 [98], Acuna-AgostMFG09 [4]	PrataAN23 [352], abs-2312-13682 [340], abs-2306-05747 [401], EfthymiouY23 [126], ShaikhK23 [379], abs-2305-19888 [197], TasselGS23 [400], GurPAE23 [182], NaderiRR23 [313], PerezGSL23 [339], BourreauGGLT22 [81], YunusogluY22 [450], HeinzNVH22 [196], ArmstrongGOS22 [15], LuoB22 [285], PohlAK22 [345], YuraszeckMPV22 [452], KlankeBYE21 [232], PandeyS21a [334], ZhangYW21 [458], BenediktMH20 [55], MejiaY20 [296], LunardiBLRV20 [283], NishikawaSTT19 [320], YounespourAKE19 [448], GallleguillosKSB19 [148], Tom19 [408], abs-1911-04766 [158], GeibingerMM19 [159]... (Total: 64)
Concepts	release-date	WinterMMW22 [442], YunusogluY22 [450], YuraszeckMPV22 [452], HanenKP21 [186], Bedhief21 [44], Polo-MejiaALB20 [346], EscobetPQPRA19 [130], Tesch18 [405], KameugneFSN14 [224], LimtanyakulS12 [268], SerraNM12 [378], KameugneFSN11 [223], KovacsB11 [239], LombardiM10a [275], BartakSR10 [38], abs-0907-0939 [342], AkkerDH07 [415], SadykovW06 [367], ArtiouchineB05 [19], Hooker05 [205], Hooker04 [204], Zhou97 [462], Zhou96 [461], Colombani96 [102]	PrataAN23 [352], LacknerMMWW23 [254], LacknerMMWW21 [253], GroleazNS20 [179], GroleazNS20a [178], abs-1911-04766 [158], GeibingerMM19 [159], HeinzSB13 [195], KelbelH11 [227], Laborie09 [250], Limtanyakul07 [267], Simonis07 [387], Hooker06 [207], Hooker05a [206], WuBB05 [446], Sadykov04 [366], SourdN00 [389]	PovedaAA23 [349], IsikYA23 [213], YuraszeckMC23 [451], TouatBT22 [410], PohlAK22 [345], AntuoriHHEN21 [12], GeibingerMM21 [160], ZhangYW21 [458], HillTV21 [202], AbreuAPNM21 [108], KovacsTKSG21 [244], GodetLHS20 [168], MejiaY20 [296], Novas19 [322], abs-1902-09244 [187], LaborieRSV18 [252], Laborie18a [251], GokgurHO18 [170], NattafAL17 [315], NattafAL15 [314], DejemeppeCS15 [112], KoschB14 [237], HeinzKB13 [192], BillautHL12 [62], HeinzB12 [191], GrimesH11 [175], KovacsK11 [241], BeniniLMR11 [58], ClercqPBJ11 [97]... (Total: 45)

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Type	Keyword		High	Medium	Low
Concepts	resource		PrataAN23 [352], abs-2402-00459 [317], JuvinHHL23 [217], KameugneFND23 [222], PovedaAA23 [349], YuraszeckMCCR23 [453], abs-2305-19888 [197], CzerniachowskaWZ23 [103], ShaikhK23 [379], AlfieriGPS23 [9], NaderiRR23 [313], AalianPG23 [1], WangB23 [437], TardivoDFMP23 [399], GurPAE23 [182], BourreauGGLT22 [81], HeinzNVH22 [196], GeitzGSSW22 [161], LuoB22 [285], AbreuN22 [109], BoudreaultSLQ22 [80], TouatBT22 [410], YunusogluY22 [450], CampeauG22 [88], SubulanC22 [391], OuelletQ22 [331], ColT22 [101], OujanaAYB22 [332], FetgoD22 [139]... (Total: 275)	Caballero23 [87], PerezGSL23 [339], abs-2312-13682 [340], IsikYA23 [213], abs-2306-05747 [401], TasselGS23 [400], Bit-Monnot23 [63], AbreuNP23 [110], abs-2211-14492 [392], PohlAK22 [345], YuraszeckMPV22 [452], MullerMKP22 [309], WinterMMW22 [442], SvancaraB22 [395], Astrand0F21 [21], KlankeBYE21 [232], MokhtarzadehTNF20 [301], TangB20 [397], LunardiBLRV20 [283], WallaceY20 [435], FrimodigS19 [145], abs-1902-01193 [8], ParkUJR19 [337], HoYCLLCLC18 [203], GedikKEK18 [156], Ham18 [184], BenediktSMVH18 [56], GelainPRVW17 [162], GoldwaserS17 [171]... (Total: 53)	MontemanniD23 [305], AkramNHRSA23 [7], SquillaciPR23 [390], Teppan22 [403], PopovicCGNC22 [347], ArmstrongGOS22 [15], JungblutK22 [216], ZhangJZL22 [457], AntuoriHHEN21 [12], HamPK21 [185], AbreuAPNM21 [108], AbohashimaEG21 [2], KoehlerBFFHPSSS21 [234], ArmstrongGOS21 [14], FanXG21 [136], abs-2102-08778 [99], MejiaY20 [296], BarzegaranZP20 [41], NattafM20 [316], BadicaBIL19 [25], KucukY19 [249], ColT19 [100], AstrandJZ18 [22], ZhangW18 [459], KletzanderM17 [233], Hooker17 [208], ZarandiKS16 [454], GayHLS15 [152], MelgarejoLS15 [6]... (Total: 53)
Concepts	scheduling		abs-2402-00459 [317], PrataAN23 [352], AbreuNP23 [110], TasselGS23 [400], Bit-Monnot23 [63], IsikYA23 [213], AalianPG23 [1], abs-2305-19888 [197], abs-2312-13682 [340], PerezGSL23 [339], abs-2306-05747 [401], JuvinHHL23 [217], TardivoDFMP23 [399], YuraszeckMC23 [451], Mehdizadeh-Somarin23 [295], MontemanniD23 [305], KimCMLLP23 [231], AkramNHRSA23 [7], ShaikhK23 [379], KameugneFND23 [222], LacknerMMWW23 [254], GurPAE23 [182], PovedaAA23 [349], EfthymiouY23 [126], AlfieriGPS23 [9], SquillaciPR23 [390], Caballero23 [87], CzerniachowskaWZ23 [103], YuraszeckMCCR23 [453]... (Total: 405)	GayHS15 [153], Kameugne15 [220], BessiereHMQW14 [61], HoundjiSWD14 [210], LetortCB13 [260], LetortBC12 [259], ChapadosJR11 [94], ClercqPBJ11 [97], Baptiste09 [26], Acuna-AgostMFG09 [4], abs-0907-0939 [342], GomesHS06 [173], MoffittPP05 [300], WuBB05 [446], DilkinaDH05 [120], HebrardTW05 [189], Vilim03 [422], ValleMGT03 [414], Vilim02 [421], HookerY02 [209], RodriguezDG02 [361], CestaOS98 [93], FrostD98 [147], Touraivane95 [411]	Hooker17 [208], RossiTHP07 [363], AbrilSB05 [3], VanczaM01 [419]
Concepts	sequence setup	dependent	GedikKEK18 [156], FocacciLN00 [140]	IsikYA23 [213], YuraszeckMPV22 [452], GeitzGSSW22 [161], MengZRZL20 [298], RiahiNS018 [359], LombardiM12 [278], Simonis07 [387], ArtiguesBF04 [17]	PrataAN23 [352], NaderiRR23 [313], abs-2305-19888 [197], YunusogluY22 [450], PohlAK22 [345], HeinzNVH22 [196], OujanaAYB22 [332], Bedhief21 [44], HamPK21 [185], ArmstrongGOS21 [14], Mercier-AubinGQ20 [299], MejiaY20 [296], MalapertN19 [289], Novas19 [322], KucukY19 [249], ArbaouiY18 [13], LaborieRSV18 [252], Ham18 [184], FahimiOQ18 [133], Pralet17 [350], CauwelaertDMS16 [92], NovaraNH16 [321], DejemeppeCS15 [112], KovacsK11 [241], GrimesH10 [174], Laborie09 [250], DavenportKRSH07 [107], AkkerDH07 [415], VilimBC05 [429]... (Total: 31)

Type	Keyword	High	Medium	Low
Concepts	setup-time	PrataAN23 [352], LacknerMMWW23 [254], IsikYA23 [213], abs-2305-19888 [197], AbreuNP23 [110], NaderiRR23 [313], YuraszeckMPV22 [452], PohlAK22 [345], GeitzGSSW22 [161], WinterMMW22 [442], HeinzNVH22 [196], AbreuN22 [109], OujanaAYB22 [332], YunusogluY22 [450], ColT22 [101], LacknerMMWW21 [253], NattafM20 [316], MejiaY20 [296], GroleazNS20 [179], Mercier-AubinGQ20 [299], QinDCS20 [355], LunardiBLRV20 [283], GroleazNS20a [178], MengZRZL20 [298], Novas19 [322], BogaerdtW19 [416], MalapertN19 [289], MurinR19 [310], ArbaouiY18 [13]... (Total: 41)	AlfieriGPS23 [9], CzerniachowskaWZ23 [103], KimCMLLP23 [231], LiFJZLL22 [262], Bedhief21 [44], AbreuAPNM21 [108], ArmstrongGOS21 [14], FanXG21 [136], AstrandJZ20 [23], LaborieRSV18 [252], NovaraNH16 [321], GaySS14 [155], OzturkTHO13 [333], KelarevaTK13 [226], ThiruvadyBME09 [406], BeniniBGM06 [57], Timpe02 [407], Vilim02 [421]	YuraszeckMCCR23 [453], JuvinHHL23 [217], JuvinHL23 [218], Mehdizadeh-Somarin23 [295], EfthymiouY23 [126], abs-2211-14492 [392], ZhangJZL22 [457], MullerMKP22 [309], Teppan22 [403], HamPK21 [185], ZhangYW21 [458], AbohashimaEG21 [2], BenderWS21 [54], GodetLHS20 [168], MokhtarzadehTNF20 [301], Polo-MejiaALB20 [346], BehrensLM19 [46], abs-1902-09244 [187], KucukY19 [249], WikarekS19 [441], GokgurHO18 [170], FahimiOQ18 [133], GilesH16 [164], ZhouGL15 [463], MelgarejoLS15 [6], GoelSHFS15 [169], SialaAH15 [383], BartakV15 [39], DejemeppeD14 [113]... (Total: 47)
Concepts	stock level	LopesCSM10 [280], SimonisC95 [388]	RossiTHP07 [363], Timpe02 [407]	KhemmoudjPB06 [230]
Concepts	tardiness	PrataAN23 [352], IsikYA23 [213], AlfieriGPS23 [9], KimCMLLP23 [231], LacknerMMWW23 [254], NaderiRR23 [313], WinterMMW22 [442], TouatBT22 [410], YunusogluY22 [450], AbreuN22 [109], OujanaAYB22 [332], PohlAK22 [345], abs-2211-14492 [392], FanXG21 [136], AntuoriHHEN21 [12], LacknerMMWW21 [253], GroleazNS20a [178], Mercier-AubinGQ20 [299], MengZRZL20 [298], TangB20 [397], abs-1902-09244 [187], ParkUJR19 [337], BogaerdtW19 [416], LaborieRSV18 [252], NovaraNH16 [321], ZarandiKS16 [454], BridiBLMB16 [83], BartoliniBBLM14 [40], LombardiM12 [278]... (Total: 42)	abs-2402-00459 [317], AbreuNP23 [110], SubulanC22 [391], ColT22 [101], KovacsTKSG21 [244], AbreuAPNM21 [108], GroleazNS20 [179], GedikKEK18 [156], GokgurHO18 [170], Hooker17 [208], NovasH10 [323], BartakSR10 [38], QuirogaZH05 [357], Hooker05 [205], GodardLN05 [166]	Mehdizadeh-Somarin23 [295], JuvinHL23 [218], abs-2306-05747 [401], TasselGS23 [400], LiFJZLL22 [262], ZhangJZL22 [457], VlkHT21 [432], HanenKP21 [186], KoehlerBFFHPSSS21 [234], GeibingerMM21 [160], HubnerGSV21 [211], QinWSLS21 [354], Bedhief21 [44], QinDCS20 [355], Polo-MejiaALB20 [346], MejiaY20 [296], LunardiBLRV20 [283], Tom19 [408], Novas19 [322], RiahiNS018 [359], ZhangW18 [459], DejemeppeCS15 [112], MelgarejoLS15 [6], ZhouGL15 [463], BurtLPS15 [86], LimBTBB15 [266], SialaAH15 [383], PraletLJ15 [351]... (Total: 46)
Concepts	task	PrataAN23 [352], abs-2402-00459 [317], JuvinHL23 [218], CzerniachowskaWZ23 [103], JuvinHHL23 [217], WangB23 [437], YuraszeckMCCR23 [453], PovedaAA23 [349], abs-2305-19888 [197], KameugneFND23 [222], AkramNHRSA23 [7], LiFJZLL22 [262], CampeauG22 [88], ColT22 [101], SubulanC22 [391], OuelletQ22 [331], FetgoD22 [139], abs-2211-14492 [392], GeitzGSSW22 [161], TouatBT22 [410], HeinzNVH22 [196], JungblutK22 [216], BoudreaultSLQ22 [80], Astrand0F21 [21], HanenKP21 [186], KoehlerBFFHPSSS21 [234], KlankeBYE21 [232], HillTV21 [202], PandeyS21a [334]... (Total: 189)	MontemanniD23a [304], Bit-Monnot23 [63], IsikYA23 [213], MontemanniD23 [305], LacknerMMWW23 [254], ShaikhK23 [379], SquillaciPR23 [390], YuraszeckMPV22 [452], PopovicCGNC22 [347], MullerMKP22 [309], WinterMMW22 [442], AbreuN22 [109], SvancaraB22 [395], OujanaAYB22 [332], BenderWS21 [54], HubnerGSV21 [211], GeibingerMM21 [160], ZouZ20 [467], BarzegaranZP20 [41], Polo-MejiaALB20 [346], BadicaBI20 [24], WallaceY20 [435], WikarekS19 [441], DemirovicS18 [115], YoungFS17 [449], LiuCGM17 [270], HechingH16 [190], GayHLS15 [152], Kameugne15 [220]... (Total: 40)	NaderiRR23 [313], TasselGS23 [400], EfthymiouY23 [126], PerezGSL23 [339], abs-2312-13682 [340], Mehdizadeh-Somarin23 [295], TardivoDFMP23 [399], abs-2306-05747 [401], Teppan22 [403], ZhangJZL22 [457], ArmstrongGOS22 [15], ZhangYW21 [458], abs-2102-08778 [99], FanXG21 [136], AbreuAPNM21 [108], AntuoriHHEN21 [12], LacknerMMWW21 [253], HamPK21 [185], AstrandJZ20 [23], SacramentoSP20 [365], FallahiAC20 [135], BenediktMH20 [55], MengZRZL20 [298], ParkUJR19 [337], MurinR19 [310], abs-1902-09244 [187], FrimodigS19 [145], abs-1902-01193 [8], MalapertN19 [289]... (Total: 79)
Concepts	temporal constraint reasoning			BartakSR10 [38], KeriK07 [228], FortinZDF05 [142]

Table 10: Works for Concepts of Type Concepts

Type	Keyword	High	Medium	Low
Concepts	transportation	CzerniachowskaWZ23 [103], ArmstrongGOS22 [15], PohlAK22 [345], BourreauGGLT22 [81], GeitzGSSW22 [161], ArmstrongGOS21 [14], QinDCS20 [355], SacramentoSP20 [365], MurinR19 [310], Ham18 [184], PourDERB18 [348], TangLWSK18 [398], GoelSHFS15 [169], NovasH14 [325], KelarevaTK13 [226], NovasH12 [324], HachemiGR11 [183], LopesCSM10 [280], BocewiczBB09 [65], Rodriguez07 [362], ZeballosH05 [455]	NaderiRR23 [313], KimCMLLP23 [231], AbreuN22 [109], SubulanC22 [391], PopovicCGNC22 [347], AbohashimaEG21 [2], MengZRZL20 [298], MejiaY20 [296], FallahiAC20 [135], LaborieRSV18 [252], EvenSH15 [131], MelgarejoLS15 [6], RendlPHPR12 [358], MakMS10 [288], MouraSCL08a [307], MouraSCL08 [308], LimRX04 [264], Mason01 [294], ArtiguesR00 [18], Wallace96 [434]	AalianPG23 [1], IsikYA23 [213], AbreuNP23 [110], abs-2312-13682 [340], WangB23 [437], MontemanniD23a [304], PerezGSL23 [339], AlfieriGPS23 [9], ColT22 [101], BoudreaultSLQ22 [80], abs-2211-14492 [392], ZhangJZL22 [457], YuraszeckMPV22 [452], LiFJZLL22 [262], YunusogluY22 [450], AntuoriHHEN21 [12], Bedhief21 [44], HubnerGSV21 [211], GroleazNS20a [178], WallaceY20 [435], Novas19 [322], abs-1902-09244 [187], Tom19 [408], GokgurHO18 [170], ZhangW18 [459], ShinBBHO18 [381], He0GLW18 [188], GedikKEK18 [156], LiuCGM17 [270]... (Total: 59)

6.2 Concept Type Classification

Table 11: Works for Concepts of Type Classification

Type	Keyword	High	Medium	Low
Classification	2BPHFSP	TangB20 [397]		
Classification	BPCTOP	KelarevaTK13 [226]		
Classification	Bulk Port Cargo Throughput Optimisation Problem			KelarevaTK13 [226]
Classification	CECSP	NattafAL17 [315], NattafAL15 [314]		
Classification	CHSP	EfthymiouY23 [126], WallaceY20 [435]		
Classification	CTW	KoehlerBFFHPSSS21 [234]		
Classification	CuSP	KameugneFND23 [222], FetgoD22 [139], Tesch18 [405], KameugneFGOQ18 [221], Tesch16 [404], NattafAL15 [314], DerrienPZ14 [118], KameugneFSN14 [224], KameugneFSN11 [223], SchuttW10 [377]	GingrasQ16 [165], OuelletQ13 [329]	TardivoDFMP23 [399], HanenKP21 [186], DerrienP14 [117]
Classification	EOSP		SquillaciPR23 [390]	
Classification	Earth Observation Scheduling Problem		SquillaciPR23 [390]	
Classification	FJS	WangB23 [437], YuraszeckMCCR23 [453], MullerMKP22 [309], Teppan22 [403], HamPK21 [185], LunardiBLRV20 [283], WangB20 [436], MengZRZL20 [298], Novas19 [322], MossigeGSMC17 [306]	OujanaAYB22 [332], abs-1902-09244 [187], ZhangW18 [459], SchuttFS13 [373]	NaderiRR23 [313], ColT22 [101], ZhouGL15 [463]
Classification	Fixed Job Scheduling	WangB20 [436]	WangB23 [437]	
Classification	GCSP	GroleazNS20 [179]		
Classification	HFF	ArmstrongGOS22 [15], OujanaAYB22 [332], ArmstrongGOS21 [14], ZhouGL15 [463]		
Classification	JSPT		MurinR19 [310]	
Classification	JSSP	JuvinHHL23 [217], YuraszeckMC23 [451], TasselGS23 [400], YuraszeckMCCR23 [453], abs-2306-05747 [401], ColT22 [101], YuraszeckMPV22 [452], GeitzGSSW22 [161], Teppan22 [403], abs-2102-08778 [99], ColT19 [100], Pralet17 [350], KelbelH11 [227], GodardLN05 [166], SourdN00 [389], PapaB98 [336], NuijtenP98 [327], NuijtenA94 [326]	GalleguillosKSB19 [148], LombardiBM15 [272], SialaAH15 [383], BelhadjiI98 [53]	EfthymiouY23 [126], Mehdizadeh-Somarin23 [295], CzerniachowskaWZ23 [103], WikarekS19 [441], PraletLJ15 [351]
Classification	KRFP	KamarainenS02 [219], SakkoutW00 [368]		
Classification	LSFRP	KelarevaTK13 [226]		
Classification	Liner Shipping Fleet Repositioning Problem		KelarevaTK13 [226]	
Classification	MGAP	Darby-DowmanLMZ97 [105]		
Classification	Modified Generalized Assignment Problem			
Classification	OSP	NaderiRR23 [313], LacknerMMWW23 [254], Bit-Monnot23 [63], LacknerMMWW21 [253], GayHLS15 [152]	SquillaciPR23 [390], GrimesHM09 [176], MonetteDD07 [302]	MengZRZL20 [298]
Classification	OSSP	YuraszeckMC23 [451], AbreuNP23 [110], YuraszeckMPV22 [452], ColT22 [101], AbreuN22 [109], AbreuAPNM21 [108], MejiaY20 [296]		YuraszeckMCCR23 [453]

Type	Keyword	High	Medium	Low
Classification	Open Shop Scheduling Problem	AbreuNP23 [110], AbreuN22 [109], AbreuAPNM21 [108], MejiaY20 [296]	LorigeonBB02 [282]	PrataAN23 [352], Bit-Monnot23 [63], YuraszeckMCCR23 [453], NaderiRR23 [313], YuraszeckMPV22 [452], ColT22 [101], MengZRZL20 [298], SacramentoSP20 [365], GrimesH10 [174], GrimesHM09 [176], MonetteDD07 [302], VerfaillieL01 [420]
Classification	PJSSP		PapaB98 [336]	
Classification	PMSP	NaderiRR23 [313], YunusogluY22 [450], WinterMMW22 [442], PandeyS21a [334], GodetLHS20 [168], MalapertN19 [289], GedikKEK18 [156]	VlkHT21 [432], NattafM20 [316]	OujanaAYB22 [332], ColT22 [101]
Classification	PP-MS-MMRCPSP			
Classification	PTC	NattafM20 [316], MalapertN19 [289]	NaderiRR23 [313]	CzerniachowskaWZ23 [103], Teppan22 [403]
Classification	Pre-emptive Job-Shop scheduling Problem			
Classification	RCPSP	YuraszeckMCCR23 [453], PovedaAA23 [349], CampeauG22 [88], BoudreaultSLQ22 [80], SubulanC22 [391], FetgoD22 [139], BenderWS21 [54], GeibingerMM21 [160], HillTV21 [202], HubnerGSV21 [211], Polo-MejiaALB20 [346], GeibingerMM19 [159], abs-1902-09244 [187], abs-1911-04766 [158], LaborieRSV18 [252], TangLWSK18 [398], KameugneFGOQ18 [221], Pralet17 [350], KreterSS17 [246], YoungFS17 [449], BofillCSV17 [66], MossigeGSMC17 [306], SzerediS16 [396], SchuttS16 [376], KreterSS15 [245], VilimLS15 [430], BonfiettiLM13 [73], HeinzSB13 [195], LombardiM12 [278]... (Total: 40)	TardivoDFMP23 [399], Caballero23 [87], KameugneFND23 [222], KovacsTKSG21 [244], GroleazNS20a [178], BaptisteB18 [27], Tesch18 [405], LombardiBM15 [272], NattafAL15 [314], GayHLS15 [152], KameugneFSN14 [224], LombardiM13 [279], KameugneFSN11 [223], HeinzS11 [194], KeriK07 [228], KovacsV06 [243], HeipckeCCS00 [198], ArtiguesR00 [18]	NaderiRR23 [313], GeitzGSSW22 [161], TouatBT22 [410], HanenKP21 [186], ZhangYW21 [458], Mercier-AubinGQ20 [299], WikarekS19 [441], OuelletQ18 [330], FahimiOQ18 [133], GingrasQ16 [165], BonfiettiZLM16 [76], Tesch16 [404], SialaAH15 [383], GayHS15a [154], DerrienPZ14 [118], BonfiettiLM14 [74], BonfiettiLBM14 [72], KoschB14 [237], SchuttFS13a [372], OuelletQ13 [329], SchuttFS13 [373], LetortCB13 [260], BonfiettiM12 [75], BonfiettiLBM12 [71], LombardiBMB11 [273], GrimesH11 [175], Vilim11 [427], LahimerLH11 [255], BonfiettiLBM11 [70]... (Total: 35)
Classification	RCPSPDC			CampeauG22 [88], HubnerGSV21 [211]
Classification	Resource-constrained Project Scheduling Problem with Discounted Cashflow			
Classification	SBSFMMAL	OzturkTHO13 [333]		
Classification	SCC	KimCMLLP23 [231], WolinskiKG04 [445]		PohlAK22 [345], BeniniLMR11 [58], SchausHMCMD11 [369]
Classification	SMSDP			
Classification	Steel-making and continuous casting			
Classification	TCSP	BelhadjiI98 [53]		BartakSR10 [38], LombardiM10a [275]
Classification	TMS	PopovicCGNC22 [347]	BegB13 [45]	CappartS17 [89]
Classification	Temporal Constraint Satisfaction Problem		BelhadjiI98 [53]	BartakSR10 [38], MoffittPP05 [300]
Classification	parallel machine	PrataAN23 [352], abs-2305-19888 [197], IsikYA23 [213], CzerniachowskaWZ23 [103], NaderiRR23 [313], ZhangJZL22 [457], WinterMMW22 [442], HeinzNVH22 [196], OujanaAYB22 [332], YunusogluY22 [450], PandeyS21a [334], GodetLHS20 [168], MengZRZL20 [298], NattafM20 [316], MalapertN19 [289], GedikKEK18 [156], ArbaouiY18 [13], GokgurHO18 [170], EdisO11 [125]	AbreuNP23 [110], Teppan22 [403], ColT22 [101], Bedhief21 [44], SacramentoSP20 [365], MejiaY20 [296], MokhtarzadehTNF20 [301], ParkUJR19 [337], Novas19 [322], BogaerdtW19 [416], BenediktSMVH18 [56], ZhouGL15 [463], KovacsB11 [239], AkkerDH07 [415], SadykovW06 [367]	KimCMLLP23 [231], JuvinHHL23 [217], LacknerMMWW23 [254], Mehdizadeh-Somarin23 [295], AlfieriGPS23 [9], ArmstrongGOS22 [15], HamPK21 [185], LacknerMMWW21 [253], HanenKP21 [186], FanXG21 [136], AbohashimaEG21 [2], AbreuAPNM21 [108], AstrandJZ20 [23], GroleazNS20a [178], QinDCS20 [355], NishikawaSTT19 [320], Ham18 [184], LaborieRSV18 [252], BaptisteB18 [27], KletzanderM17 [233], KreterSS17 [246], FontaineMH16 [141], BurtLPS15 [86], KreterSS15 [245], NovasH14 [325], LombardiM12 [278], LahimerLH11 [255], ArtiouchineB05 [19], Sadykov04 [366], LorigeonBB02 [282]

Table 11: Works for Concepts of Type Classification

Type	Keyword	High	Medium	Low
Classification	psplib	TardivoDFMP23 [399], OuelletQ18 [330], GayHS15a [154], LetortCB15 [261], KameugneFSN14 [224], DerrienP14 [117], SchuttFS13a [372], HeinzSB13 [195], SchuttFSW11 [375], BertholdHLMS10 [60], SchuttFSW09 [374]	KameugneFND23 [222], BoudreaultSLQ22 [80], HillTV21 [202], BadicaBI20 [24], Tesch18 [405], FahimiOQ18 [133], BaptisteB18 [27], SzerediS16 [396], Tesch16 [404], GingrasQ16 [165], GayHLS15 [152], VilimLS15 [430], LombardiBM15 [272], BonfiettiLM14 [74], LetortCB13 [260], LombardiM12a [277], LetortBC12 [259], HeinzS11 [194], Vilim11 [427], SchuttW10 [377]	LaborieRSV18 [252], Pralet17 [350], YoungFS17 [449], BofillCSV17 [66], LombardiM13 [279], OuelletQ13 [329], LombardiM12 [278], KameugneFSN11 [223], LiessM08 [263], FortinZDF05 [142], ElkhyariGJ02a [128]
Classification	single machine	PrataAN23 [352], AlfieriGPS23 [9], LacknerMMWW23 [254], TouatBT22 [410], HamPK21 [185], BenediktMH20 [55], BogaerdtW19 [416], KovacsB11 [239], ThiruvadyBME09 [406], SadykovW06 [367], SourdN00 [389]	YuraszeckMPV22 [452], PandeyS21a [334], Bedhief21 [44], HillTV21 [202], KoehlerBFFHPSSS21 [234], AbreuAPNM21 [108], LacknerMMWW21 [253], NattafM20 [316], BenediktSMVH18 [56], Tesch18 [405], KoschB14 [237], BillautHL12 [62], KovacsK11 [241], AkkerDH07 [415], Sadykov04 [366], OddiPCC03 [328], SchildW00 [370]	abs-2402-00459 [317], IsikYA23 [213], NaderiRR23 [313], Mehdizadeh-Somarin23 [295], GeitzGSSW22 [161], AbreuN22 [109], ColT22 [101], abs-2211-14492 [392], PohlAK22 [345], ZhangJZL22 [457], LiFJZLL22 [262], FanXG21 [136], QinWSLS21 [354], KovacsTKSG21 [244], TangB20 [397], GodetLHS20 [168], ParkUJR19 [337], Tom19 [408], MalapertN19 [289], GedikKEK18 [156], AstrandJZ18 [22], ArbaouiY18 [13], GokgurHO18 [170], MossigeGSMC17 [306], DoulabiRP16 [124], ZarandiKS16 [454], DejemeppeCS15 [112], MelgarejoLS15 [6], BurtLPS15 [86]... (Total: 48)

6.3 Concept Type Constraints

Table 12: Works for Concepts of Type Constraints

Type	Keyword	High	Medium	Low
Constraints	alldifferent	JuvinHHL23 [217], KoehlerBFFHPSSS21 [234], Simonis07 [387]	GodetLHS20 [168], BessiereHMQW14 [61], KelarevaTK13 [226]	WangB23 [437], ColT22 [101], BourreauGGLT22 [81], AstrandJZ20 [23], WangB20 [436], MokhtarzadehTNF20 [301], FahimiOQ18 [133], MelgarejoLS15 [6], AlesioNBG14 [119], ClercqPBJ11 [97], HermenierDL11 [201], HachemiGR11 [183], TrojetHL11 [412], LopesCSM10 [280], BeldiceanuC94 [48]
Constraints	alternative constraint	LaborieRSV18 [252]	abs-2305-19888 [197], MurinR19 [310], GokgurHO18 [170]	LacknerMMWW23 [254], NaderiRR23 [313], WinterMMW22 [442], ZhangJZL22 [457], SvancaraB22 [395], HeinzNVH22 [196], ArmstrongGOS21 [14], HubnerGSV21 [211], PandeyS21a [334], VlkHT21 [432], HillTV21 [202], MengZRZL20 [298], Polo-MejiaALB20 [346], SacramentoSP20 [365], YounespourAKE19 [448], EscobetPQPRA19 [130], GeibingerMM19 [159], NishikawaSTT19 [320], GalleguillosKSB19 [148], MalapertN19 [289], abs-1911-04766 [158], ArbaouiY18 [13], Laborie18a [251], NishikawaSTT18a [319], NishikawaSTT18 [318], CappartS17 [89], NovaraNH16 [321], PraletLJ15 [351], BartoliniBBLM14 [40]... (Total: 32)
Constraints	alwaysIn	PopovicCGNC22 [347], SerraNM12 [378]	AalianPG23 [1], LuoB22 [285], TangB20 [397], Polo-MejiaALB20 [346], MalapertN19 [289], LaborieRSV18 [252], GoelSHFS15 [169]	CampeauG22 [88], KreterSS17 [246]
Constraints	bin-packing	TangB20 [397], LetortCB15 [261], LetortCB13 [260], HeinzSSW12 [193], LetortBC12 [259], SchausHMCMD11 [369]	LuoB22 [285], BadicaBI20 [24], FrimodigS19 [145], BaptisteB18 [27], GarganiR07 [149], SakkoutW00 [368], SchildW00 [370]	abs-2402-00459 [317], LacknerMMWW23 [254], AkramNHRSA23 [7], abs-2211-14492 [392], YunusogluY22 [450], ArmstrongGOS21 [14], GodetLHS20 [168], Madi-WambaLOBM17 [287], DoulabiRP16 [124], KoschB14 [237], DoulabiRP14 [123], LimtanyakulS12 [268], EdisO11 [125], HermenierDL11 [201], BeldiceanuCDP11 [50], KovacsB08 [238], HentenryckM08 [200], Simonis07 [387], DavenportKRSH07 [107], BeldiceanuC94 [48], AggounB93 [5]
Constraints	circuit	MontemanniD23a [304], KlankeBYE21 [232], Mercier-AubinGQ20 [299], MokhtarzadehTNF20 [301], RuggieroBBMA09 [364], Rodriguez07 [362], RodriguezDG02 [361], GruianK98 [180], Wallace96 [434], BeldiceanuC94 [48]	WessenCS20 [440], KrogtLPHJ07 [417], KuchcinskiW03 [247], DincbasSH90 [121]	PrataAN23 [352], IsikYA23 [213], MontemanniD23 [305], JungblutK22 [216], ColT22 [101], MullerMKP22 [309], KoehlerBFFHPSSS21 [234], ArmstrongGOS21 [14], WallaceY20 [435], GroleazNS20 [179], EscobetPQPRA19 [130], TangLWSK18 [398], Hooker17 [208], HechingH16 [190], Bonfietti16 [69], BridiBLMB16 [83], MelgarejoLS15 [6], MurphyMB15 [311], HoundjiSWD14 [210], BonfiettiLBM14 [72], CireCH13 [96], SchuttFS13a [372], LombardiM12 [278], BeniniLMR11 [58], SchuttFSW11 [375], CobanH10 [98], Hooker06 [207], QuSN06 [356], Hooker05a [206]... (Total: 37)

Table 12: Works for Concepts of Type Constraints

Type	Keyword	High	Medium	Low
Constraints	cumulative	PovedaAA23 [349], TardivoDFMP23 [399], NaderiRR23 [313], AalianPG23 [1], KameugneFND23 [222], IsikYA23 [213], LacknerMMWW23 [254], FetgoD22 [139], PohlAK22 [345], OuelletQ22 [331], ZhangJZL22 [457], LuoB22 [285], BoudreaultSLQ22 [80], LacknerMMWW21 [253], HanenKP21 [186], KovacsTKSG21 [244], SacramentoSP20 [365], Polo-MejiaALB20 [346], Mercier-AubinGQ20 [299], WallaceY20 [435], GodetLHS20 [168], GroleazNS20a [178], GroleazNS20 [179], YangSS19 [447], abs-1911-04766 [158], Novas19 [322], MalapertN19 [289], GeibingerMM19 [159], LaborieRSV18 [252]... (Total: 118)	PrataAN23 [352], abs-2402-00459 [317], EfthymiouY23 [126], abs-2312-13682 [340], PerezGSL23 [339], ColT22 [101], YunusogluY22 [450], CampeauG22 [88], GeitzGSSW22 [161], AbreuN22 [109], HubnerGSV21 [211], HillTV21 [202], KlankeBYE21 [232], NattafM20 [316], GalleguillosKSB19 [148], NishikawaSTT19 [320], BorghesiBLMB18 [78], GedikKEK18 [156], BoothNB16 [77], BonfiettiZLM16 [76], LimHTB16 [265], Bonfietti16 [69], GayHLS15 [152], BurtLPS15 [86], GuSS13 [181], BonfiettiLM13 [73], LimtanyakulS12 [268], BartakS11 [37], KovacsB11 [239]... (Total: 42)	GurPAE23 [182], TasselGS23 [400], abs-2306-05747 [401], abs-2305-19888 [197], Bit-Monnot23 [63], YuraszeckMCCR23 [453], JuvinHHL23 [217], HeinzNVH22 [196], PopovicCGNC22 [347], abs-2211-14492 [392], SubulanC22 [391], ArmstrongGOS22 [15], PandeyS21a [334], KoehlerBFFHPSSS21 [234], GeibingerMM21 [160], ArmstrongGOS21 [14], ZouZ20 [467], abs-1902-09244 [187], FrimodigS19 [145], WikarekS19 [441], YounespourAKE19 [448], Laborie18a [251], AstrandJZ18 [22], ZhangW18 [459], Ham18 [184], ArbaouiY18 [13], DemirovicS18 [115], CappartS17 [89], GoldwaserS17 [171]... (Total: 78)
Constraints	cycle	AalianPG23 [1], Astrand0F21 [21], AntuoriHHEN21 [12], AbohashimaEG21 [2], GroleazNS20a [178], WallaceY20 [435], AstrandJZ20 [23], ParkUJR19 [337], BorghesiBLMB18 [78], AstrandJZ18 [22], BridiBLMB16 [83], BonfiettiLBM14 [72], BessiereHMQW14 [61], BegB13 [45], LombardiBMB11 [273], SunLYL10 [393], BocewiczBB09 [65], RuggieroBBMA09 [364], MalikMB08 [291], RossiTHP07 [363], WolinskiKG04 [445], KuchcinskiW03 [247], Kumar03 [248], ArtiguesR00 [18], SchildW00 [370], KorbaaYG99 [235], GruianK98 [180], RodosekW98 [360], BeldiceanuC94 [48], ErtlK91 [129]	EfthymiouY23 [126], CampeauG22 [88], KoehlerBFFHPSSS21 [234], HillTV21 [202], HubnerGSV21 [211], GroleazNS20 [179], MossigeGSMC17 [306], SimoninAHL15 [385], PraletLJ15 [351], BurtLPS15 [86], SimoninAHL12 [384], BonfiettiLBM12 [71], HachemiGR11 [183], KovacsB11 [239], BonfiettiLBM11 [70], Vilim11 [427], KovacsB08 [238], Simonis07 [387], LiuJ06 [271], BeniniBGM06 [57], KhemmoudjPB06 [230], OddiPCC03 [328], Wallace96 [434]	Bit-Monnot23 [63], AkramNHRSA23 [7], BourreauGGLT22 [81], AbreuN22 [109], HamPK21 [185], ArmstrongGOS21 [14], AbreuAPNM21 [108], FanXG21 [136], FallahiAC20 [135], TangB20 [397], Mercier-AubinGQ20 [299], QinDCS20 [355], BadicaBI20 [24], MokhtarzadehTNF20 [301], BadicaBIL19 [25], abs-1902-09244 [187], KucukY19 [249], EscobetPQPRA19 [130], TangLWSK18 [398], LaborieRSV18 [252], Ham18 [184], KreterSS17 [246], Pralet17 [350], DoulabiRP16 [124], BonfiettiZLM16 [76], MurphyMB15 [311], LetortCB15 [261], DejemeppeCS15 [112]... (Total: 63)
Constraints	diffn	ArmstrongGOS21 [14], Simonis07 [387], BeldiceanuC94 [48]	BeldiceanuCDP11 [50]	LuoB22 [285], BourreauGGLT22 [81], KreterSS17 [246], KreterSS15 [245], TrojetHL11 [412], Timpe02 [407], GruianK98 [180], SimonisC95 [388], Simonis95 [386]
Constraints	disjunctive	JuvinHHL23 [217], NaderiRR23 [313], Bit-Monnot23 [63], YuraszeckMPV22 [452], BourreauGGLT22 [81], KoehlerBFFHPSSS21 [234], GodetLHS20 [168], LaborieRSV18 [252], FahimiOQ18 [133], GokgurHO18 [170], NattafAL17 [315], Pralet17 [350], MossigeGSMC17 [306], FontaineMH16 [141], GoelSHFS15 [169], GayHS15a [154], MelgarejoLS15 [6], SialaAH15 [383], SchuttFS13 [373], OzturkTHO13 [333], SchuttFS13a [372], LombardiM12 [278], BeldiceanuCDP11 [50], SchuttFSW11 [375], LopesCSM10 [280], SchuttW10 [377], GrimesH10 [174], BartakSR10 [38], LombardiM10a [275]... (Total: 49)	BoudreaultSLQ22 [80], Astrand0F21 [21], GeibingerMM21 [160], SacramentoSP20 [365], AstrandJZ20 [23], MejiaY20 [296], Polo-MejiaALB20 [346], YangSS19 [447], DemirovicS18 [115], KameugneFGOQ18 [221], SimoninAHL15 [385], EvenSH15 [131], EvenSH15a [132], GayHS15 [153], VilimLS15 [430], KameugneFSN14 [224], GaySS14 [155], KelbelH11 [227], HeinzS11 [194], GrimesH11 [175], LiessM08 [263], MouraSCL08a [307], MouraSCL08 [308], MonetteDD07 [302], ArtiouchineB05 [19], SchildW00 [370], ArtiguesR00 [18], NuijtenP98 [327], Darby-DowmanLMZ97 [105]	abs-2402-00459 [317], LacknerMMWW23 [254], TardivoDFMP23 [399], abs-2306-05747 [401], KameugneFND23 [222], PovedaAA23 [349], EfthymiouY23 [126], TasselGS23 [400], MullerMKP22 [309], OuelletQ22 [331], ColT22 [101], abs-2211-14492 [392], OujanaAYB22 [332], KlankeBYE21 [232], ZhangYW21 [458], Mercier-AubinGQ20 [299], WallaceY20 [435], KucukY19 [249], abs-1911-04766 [158], WikarekS19 [441], ColT19 [100], AstrandJZ18 [22], OuelletQ18 [330], Ham18 [184], YoungFS17 [449], GoldwaserS17 [171], BoothNB16 [77], GingrasQ16 [165], Tesch16 [404]... (Total: 100)

Table 12: Works for Concepts of Type Constraints

Type	Keyword	High	Medium	Low
Constraints	endBeforeStart	SubulanC22 [391], QinDCS20 [355]	NaderiRR23 [313], IsikYA23 [213], PandeyS21a [334], LunardiBLRV20 [283], MengZRZL20 [298], LaborieRSV18 [252], NovaraNH16 [321], Laborie09 [250]	JuvinHHL23 [217], YuraszeckMCCR23 [453], CzerniachowskaWZ23 [103], LacknerMMWW23 [254], JuvinHL23 [218], AalianPG23 [1], Teppan22 [403], YunusogluY22 [450], CampeauG22 [88], ZhangJZL22 [457], HamPK21 [185], HubnerGSV21 [211], ZhangYW21 [458], LacknerMMWW21 [253], TangB20 [397], ZouZ20 [467], SacramentoSP20 [365], BenediktMH20 [55], Polo-MejiaALB20 [346], MurinR19 [310], abs-1902-09244 [187], ParkUJR19 [337], GeibingerMM19 [159], abs-1911-04766 [158], Novas19 [322], NishikawaSTT18a [319], NishikawaSTT18 [318], Ham18 [184]
Constraints	geost	BeldiceanuCDP11 [50]	LetortBC12 [259], PembertonG98 [338]	BeldiceanuCP08 [51]
Constraints	noOverlap	abs-2305-19888 [197], NaderiRR23 [313], IsikYA23 [213], JuvinHHL23 [217], HeinzNVH22 [196], ColT22 [101], PopovicCGNC22 [347], VlkHT21 [432], LunardiBLRV20 [283], QinDCS20 [355], GedikKEK18 [156], MelgarejoLS15 [6]	KimCMLLP23 [231], abs-2306-05747 [401], LacknerMMWW23 [254], TasselGS23 [400], AbreuN22 [109], YuraszeckMPV22 [452], PohlAK22 [345], SvancaraB22 [395], KlankeBYE21 [232], Bedhief21 [44], BenderWS21 [54], BenediktMH20 [55], MengZRZL20 [298], ZouZ20 [467], SacramentoSP20 [365], YounespourAKE19 [448], MalapertN19 [289], MurinR19 [310], abs-1911-04766 [158], EscobetPQPRA19 [130], Novas19 [322], LaborieRSV18 [252], ZhangW18 [459], ArbaouiY18 [13], Ham18 [184], NovaraNH16 [321], BoothNB16 [77], GoelSHFS15 [169], PraletLJ15 [351], EdisO11 [125]	AbreuNP23 [110], JuvinHL23 [218], YuraszeckMC23 [451], AalianPG23 [1], CzerniachowskaWZ23 [103], SquillaciPR23 [390], Teppan22 [403], YunusogluY22 [450], WinterMMW22 [442], CampeauG22 [88], OujanaAYB22 [332], ArmstrongGOS22 [15], TouatBT22 [410], ZhangJZL22 [457], HamPK21 [185], AbreuAPNM21 [108], LacknerMMWW21 [253], GroleazNS20 [179], GroleazNS20a [178], NattafM20 [316], Polo-MejiaALB20 [346], BogaerdtW19 [416], ColT19 [100], GeibingerMM19 [159], KucukY19 [249], ParkUJR19 [337], BenediktSMVH18 [56], CappartS17 [89], HechingH16 [190]... (Total: 32)
Constraints	regular expression		FrimodigS19 [145]	
Constraints	span constraint		CappartS17 [89], SchuttFS13 [373], LombardiM10a [275], Darby-DowmanLMZ97 [105]	OujanaAYB22 [332], TangB20 [397], ZouZ20 [467], YounespourAKE19 [448], LaborieRSV18 [252], SimoninAHL15 [385], SimoninAHL12 [384], SchuttFSW11 [375]
Constraints	table constraint	LombardiM10a [275], PapaB98 [336]	JelinekB16 [214]	PerezGSL23 [339], abs-2312-13682 [340], ArmstrongGOS21 [14], GayHS15 [153], PesantRR15 [341], MelgarejoLS15 [6], LimtanyakulS12 [268], BeniniLMR11 [58], BeckFW11 [43], HermenierDL11 [201], LopesCSM10 [280], MouraSCL08 [308], GodardLN05 [166], ElkhyariGJ02 [127]

6.4 Concept Type ProgLanguages

Table 13: Works for Concepts of Type ProgLanguages

Type	Keyword	High	Medium	Low
ProgLanguages	C	KoehlerBFFHPSSS21 [234]		HubnerGSV21 [211], BogaerdtW19 [416], TangLWSK18 [398], LaborieRSV18 [252], HoYCLLCLC18 [203], LombardiM10a [275], Laborie09 [250], GarridoOS08 [151]
ProgLanguages	C++		BourreauGGLT22 [81]	TardivoDFMP23 [399], JuvinHHL23 [217], PopovicCGNC22 [347], ColT22 [101], AntuoriHHEN21 [12], QinWSLS21 [354], AbreuAPNM21 [108], Polo-MejiaALB20 [346], AstrandJZ20 [23], Mercier-AubinGQ20 [299], abs-1902-01193 [8], LaborieRSV18 [252], ArbaouiY18 [13], NattafAL17 [315], BoothNB16 [77], Tesch16 [404], Bonfietti16 [69], NattafAL15 [314], LombardiBMB11 [273], LahimerLH11 [255], BeckFW11 [43], KovacsK11 [241], KovacsB11 [239], LopesCSM10 [280], ThiruvadyBME09 [406], MouraSCL08 [308], LiessM08 [263], WatsonB08 [439], MouraSCL08a [307]... (Total: 42)
ProgLanguages	Java	abs-2102-08778 [99]	KuchcinskiW03 [247]	abs-2306-05747 [401], AlfieriGPS23 [9], TasselGS23 [400], KameugneFND23 [222], MullerMKP22 [309], FetgoD22 [139], ColT22 [101], YuraszeckMPV22 [452], OuelletQ22 [331], Teppan22 [403], FanXG21 [136], AntuoriHHEN21 [12], ArmstrongGOS21 [14], MejiaY20 [296], SacramentoSP20 [365], TangB20 [397], BarzegaranZP20 [41], abs-1911-04766 [158], FrohnerTR19 [146], Tom19 [408], ColT19 [100], GeibingerMM19 [159], OuelletQ18 [330], LaborieRSV18 [252], KameugneFGOQ18 [221], Madi-WambaB16 [286], CauwelaertDMS16 [92], LetortCB15 [261], EvenSH15a [132]... (Total: 46)
ProgLanguages	Julia			
ProgLanguages	Lisp			Wallace96 [434]
ProgLanguages	Prolog	ArmstrongGOS21 [14], FalaschiGMP97 [134], Zhou97 [462], LammaMM97 [256], Wallace96 [434], Touraivane95 [411], Simonis95 [386], DincbasSH90 [121]	BadicaBI20 [24], MossigeGSMC17 [306], Madi-WambaLOBM17 [287], MartinPY01 [293], RodosekW98 [360], Zhou96 [461], SimonisC95 [388], BeldiceanuC94 [48], AggounB93 [5]	PopovicCGNC22 [347], ArmstrongGOS22 [15], abs-1902-01193 [8], YangSS19 [447], JelinekB16 [214], LetortCB15 [261], LetortCB13 [260], LetortBC12 [259], TrojetHL11 [412], BeldiceanuCDP11 [50], BartakCS10 [36], AronssonBK09 [16], BeldiceanuCP08 [51], KrogtLPHJ07 [417], Simonis07 [387], QuSN06 [356], Geske05 [163], PoderBS04 [344], Bartak02 [34], BeldiceanuC02 [49], KorbaaYG99 [235], Darby-DowmanLMZ97 [105], BrusoniCLMMT96 [85], Goltz95 [172], ErtlK91 [129]
ProgLanguages	Python	KoehlerBFFHPSSS21 [234]	abs-2211-14492 [392], AbreuN22 [109], AbreuAPNM21 [108], LaborieRSV18 [252]	EfthymiouY23 [126], SquillaciPR23 [390], Mehdizadeh-Somarin23 [295], AbreuNP23 [110], KimCMLLP23 [231], MontemanniD23 [305], PovedaAA23 [349], MontemanniD23a [304], AkramNHRSA23 [7], NaderiRR23 [313], FetgoD22 [139], PohlAK22 [345], MullerMKP22 [309], LuoB22 [285], CampeauG22 [88], KlankeBYE21 [232], FanXG21 [136], HanenKP21 [186], BenderWS21 [54], AbohashimaEG21 [2], LunardiBLRV20 [283], Mercier-AubinGQ20 [299], FrimodigS19 [145], BehrensLM19 [46], FrohnerTR19 [146], GalleguillosKSB19 [148], abs-1902-01193 [8], abs-1901-07914 [47], He0GLW18 [188]... (Total: 31)

6.5 Concept Type CPSystems

Table 14: Works for Concepts of Type CPSystems

Type	Keyword	High	Medium	Low
CPSystems	CHIP	TrojetHL11 [412], Simonis07 [387], GruianK98 [180], Wallace96 [434], Simonis95 [386], Goltz95 [172], SimonisC95 [388], BeldiceanuC94 [48], AggounB93 [5], DincbasSH90 [121]	ArmstrongGOS21 [14], YangSS19 [447], LaborieRSV18 [252], Geske05 [163], PoderBS04 [344], Timpe02 [407], RodosekW98 [360], Zhou97 [462], LammaMM97 [256]	PrataAN23 [352], TardivoDFMP23 [399], KameugneFND23 [222], LuoB22 [285], FetgoD22 [139], BourreauGGLT22 [81], PopovicCGNC22 [347], KlankeBYE21 [232], GodetLHS20 [168], abs-1902-01193 [8], BaptisteB18 [27], KameugneFGOQ18 [221], GokgurHO18 [170], MossigeGSMC17 [306], Pralet17 [350], KreterSS17 [246], Madi-WambaB16 [286], FontaineMH16 [141], ZhouGL15 [463], SimoninAHL15 [385], LetortCB15 [261], KreterSS15 [245], GrimesIOS14 [177], KameugneFSN14 [224], DerrienPZ14 [118], OzturkTHO13 [333], SchuttFS13a [372], SimoninAHL12 [384], SchuttCSW12 [371]... (Total: 50)
CPSystems	CPO	NaderiRR23 [313], LacknerMMWW23 [254], JuvinHHL23 [217], Bit-Monnot23 [63], CzerniachowskaWZ23 [103], WinterMMW22 [442], ColT22 [101], LacknerMMWW21 [253], ArmstrongGOS21 [14], NattafM20 [316], GroleazNS20 [179], Polo-MejiaALB20 [346], GroleazNS20a [178], SacramentoSP20 [365], GeibingerMM19 [159], ColT19 [100], MalapertN19 [289], LaborieRSV18 [252], KreterSS17 [246], GoelSHFS15 [169], PraletLJ15 [351], Laborie09 [250]	AalianPG23 [1], abs-1911-04766 [158], NuijtenA94 [326]	JuvinHL23 [218], PovedaAA23 [349], OujanaAYB22 [332], GeibingerMM21 [160], abs-2102-08778 [99], TangB20 [397], Laborie18a [251], Pralet17 [350], VilimLS15 [430], BartakSR10 [38], GarridoAO09 [150], Vilim09 [425], GarridoOS08 [151], BeldiceanuC94 [48]
CPSystems	Choco Solver	TasselGS23 [400], abs-2306-05747 [401], LetortCB15 [261], LetortCB13 [260], OuelletQ13 [329], LetortBC12 [259], GrimesHM09 [176], abs-0907-0939 [342], GarridoAO09 [150], GarridoOS08 [151]	KameugneFND23 [222], MullerMKP22 [309], FetgoD22 [139], AntuoriHHEN21 [12], LiuLH19 [269], FahimiOQ18 [133], KameugneFGOQ18 [221], LaborieRSV18 [252], GayHS15 [153], KoschB14 [237], DerrienPZ14 [118], DerrienP14 [117], HermenierDL11 [201], ClercqPBJ11 [97]	BourreauGGLT22 [81], OuelletQ22 [331], GodetLHS20 [168], YangSS19 [447], OuelletQ18 [330], GingrasQ16 [165], Madi-WambaB16 [286], EvenSH15a [132], MurphyMB15 [311], EvenSH15 [131], BessiereHMQW14 [61], BartakSR10 [38], RossiTHP07 [363]
CPSystems	Chuffed	LacknerMMWW23 [254], PovedaAA23 [349], BoudreaultSLQ22 [80], MullerMKP22 [309], LacknerMMWW21 [253], GeibingerMM21 [160], ArmstrongGOS21 [14], KoehlerBFFHPSSS21 [234], WallaceY20 [435], GodetLHS20 [168], abs-1911-04766 [158], YoungFS17 [449], KreterSS17 [246], SzerediS16 [396], KreterSS15 [245]		SchuttS16 [376]
CPSystems	Claire	BaptisteP00 [30]	BaptisteP97 [29]	HanenKP21 [186], PapaB98 [336]

Table 14: Works for Concepts of Type CPSystems

Type	Keyword	High	Medium	Low
CPSystems	Cplex	CzerniachowskaWZ23 [103], NaderiRR23 [313], SubulanC22 [391], BourreauGGLT22 [81], MullerMKP22 [309], WinterMMW22 [442], HubnerGSV21 [211], GeibingerKKMMW21 [157], KoehlerBFFHPSSS21 [234], PandeyS21a [334], Bedhief21 [44], HamPK21 [185], QinDCS20 [355], ZouZ20 [467], SacramentoSP20 [365], MejiaY20 [296], LunardiBLRV20 [283], MengZRZL20 [298], MurinR19 [310], GeibingerMM19 [159], abs-1911-04766 [158], NishikawaSTT19 [320], GurEA19 [468], LaborieRSV18 [252], NishikawaSTT18 [318], NishikawaSTT18a [319], KreterSS17 [246], NovaraNH16 [321], KoschB14 [237]... (Total: 34)	LacknerMMWW23 [254], Mehdizadeh-Somarin23 [295], AbreuNP23 [110], IsikYA23 [213], CampeauG22 [88], YunusogluY22 [450], LuoB22 [285], ColT22 [101], TouatBT22 [410], LacknerMMWW21 [253], KovacsTKSG21 [244], QinWSLS21 [354], ArmstrongGOS21 [14], MokhtarzadehTNF20 [301], NattafM20 [316], WallaceY20 [435], abs-1902-09244 [187], MalapertN19 [289], Novas19 [322], DoulabiRP16 [124], HechingH16 [190], VilimLS15 [430], BofillGSV15 [68], NattafAL15 [314], PraletLJ15 [351], BofillEGPSV14 [67], GrimesIOS14 [177], HeinzKB13 [192], HeinzB12 [191]... (Total: 41)	AlfieriGPS23 [9], JuvinHL23 [218], SquillaciPR23 [390], GurPAE23 [182], PovedaAA23 [349], YuraszeckMCCR23 [453], AalianPG23 [1], abs-2211-14492 [392], YuraszeckMPV22 [452], PohlAK22 [345], PopovicCGNC22 [347], AbreuN22 [109], ZhangYW21 [458], abs-2102-08778 [99], GeibingerMM21 [160], FanXG21 [136], VlkHT21 [432], KlankeBYE21 [232], AbreuAPNM21 [108], TangB20 [397], Polo-MejiaALB20 [346], GroleazNS20a [178], FrimodigS19 [145], BogaerdtW19 [416], EscobetPQPRA19 [130], KucukY19 [249], Ham18 [184], PourDERB18 [348], TangLWSK18 [398]... (Total: 73)
CPSystems	ECLiPSe	BadicaBI20 [24], BadicaBIL19 [25], RodosekW98 [360]	SchuttFSW11 [375], KamarainenS02 [219], Darby-DowmanLMZ97 [105], Wallace96 [434]	FanXG21 [136], MejiaY20 [296], WikarekS19 [441], ZeballosQH10 [456], SchuttFSW09 [374], BeniniBGM06 [57], ChuX05 [95], QuirogaZH05 [357], MartinPY01 [293], LammaMM97 [256]
CPSystems	Gecode	TardivoDFMP23 [399], BadicaBI20 [24], AstrandJZ20 [23], BadicaBIL19 [25], SzerediS16 [396], ZhouGL15 [463], GayHS15 [153], KameugneFSN14 [224]	MullerMKP22 [309], AntuoriHHEN21 [12], GeibingerKKMMW21 [157], Astrand0F21 [21], FrohnerTR19 [146], abs-1911-04766 [158], GeibingerMM19 [159], LaborieRSV18 [252], BurtLPS15 [86], BofillEGPSV14 [67], KovacsK11 [241], KameugneFSN11 [223], ThiruvadyBME09 [406]	ArmstrongGOS21 [14], WessenCS20 [440], WallaceY20 [435], MengZRZL20 [298], FrimodigS19 [145], YangSS19 [447], AstrandJZ18 [22], GoldwaserS17 [171], PesantRR15 [341], MonetteDD07 [302]
CPSystems	Gurobi	WangB23 [437], NaderiRR23 [313], LacknerMMWW23 [254], WinterMMW22 [442], KovacsTKSG21 [244], GeibingerKKMMW21 [157], KoehlerBFFHPSSS21 [234], LacknerMMWW21 [253], WangB20 [436], WallaceY20 [435], FrohnerTR19 [146]	VlkHT21 [432], GoldwaserS17 [171], FontaineMH16 [141]	KimCMLLP23 [231], abs-2305-19888 [197], MontemanniD23 [305], HeinzNVH22 [196], PohlAK22 [345], HubnerGSV21 [211], FanXG21 [136], KlankeBYE21 [232], AbohashimaEG21 [2], BenediktMH20 [55], MengZRZL20 [298], He0GLW18 [188], DemirovicS18 [115], BenediktSMVH18 [56], BurtLPS15 [86], PesantRR15 [341]
CPSystems	Ilog Scheduler	GrimesH11 [175], ZeballosQH10 [456]	LaborieRSV18 [252], NovasH12 [324], HeinzB12 [191], LimtanyakulS12 [268], BeckFW11 [43], GrimesHM09 [176], WatsonB08 [439], ZeballosH05 [455], NuijtenP98 [327]	Laborie18a [251], SchuttS16 [376], NovasH14 [325], BeniniLMR11 [58], KovacsB11 [239], SchuttFSW11 [375], LahimerLH11 [255], HachemiGR11 [183], LopesCSM10 [280], NovasH10 [323], Vilim09a [426], RuggieroBBMA09 [364], KovacsB08 [238], MouraSCL08a [307], MouraSCL08 [308], HoeveGSL07 [418], Rodriguez07 [362], Simonis07 [387], KovacsV06 [243], Hooker06 [207], WuBB05 [446], ArtiouchineB05 [19], QuirogaZH05 [357], GodardLN05 [166], Hooker05a [206], Hooker05 [205], KovacsV04 [242], ArtiguesBF04 [17], Hooker04 [204]... (Total: 34)
CPSystems	Ilog Solver	GrimesH11 [175], ZeballosQH10 [456]		abs-1902-01193 [8], LaborieRSV18 [252], ZarandiKS16 [454], PesantRR15 [341], BonfiettiLBM14 [72], NovasH14 [325], OzturkTHO13 [333], BonfiettiLBM12 [71], NovasH12 [324], HeinzB12 [191], LombardiM12a [277], KelbelH11 [227], BonfiettiLBM11 [70], KovacsK11 [241], KovacsB11 [239], TopalogluO11 [409], LombardiM10 [276], LopesCSM10 [280], LombardiM09 [274], RuggieroBBMA09 [364], MouraSCL08a [307], MouraSCL08 [308], KovacsB08 [238], Rodriguez07 [362], GomesHS06 [173], BeniniBGM06 [57], QuirogaZH05 [357], ZeballosH05 [455], GodardLN05 [166]... (Total: 41)

Type	Keyword	High	Medium	Low
CPSystems	MiniZinc	LacknerMMWW23 [254], TardivoDFMP23 [399], ColT22 [101], BoudreaultSLQ22 [80], MullerMKP22 [309], JungblutK22 [216], ArmstrongGOS21 [14], KoehlerBFFHPSSS21 [234], LacknerMMWW21 [253], Mercier-AubinGQ20 [299], WallaceY20 [435], abs-1911-04766 [158], ColT19 [100], FrohnerTR19 [146], GeibingerMM19 [159], YoungFS17 [449], LiuCGM17 [270], SzerediS16 [396], BofillEGPSV14 [67], KelarevaTK13 [226]	PovedaAA23 [349], KreterSS17 [246], KreterSS15 [245]	Bit-Monnot23 [63], OuelletQ22 [331], GeibingerKKMMW21 [157], abs-2102-08778 [99], abs-1901-07914 [47], FrimodigS19 [145], BehrensLM19 [46], DemirovicS18 [115], FontaineMH16 [141], SchuttS16 [376], BurtLPS15 [86], HeinzSB13 [195], SchuttFS13 [373]
CPSystems	Mistral	JuvinHHL23 [217], GrimesHM09 [176]	Bit-Monnot23 [63], BillautHL12 [62]	SialaAH15 [383]
CPSystems	OPL	LacknerMMWW23 [254], YunusogluY22 [450], MullerMKP22 [309], TouatBT22 [410], ColT22 [101], LacknerMMWW21 [253], PandeyS21a [334], KoehlerBFFHPSSS21 [234], QinDCS20 [355], Novas19 [322], EscobetPQPRA19 [130], TangLWSK18 [398], LaborieRSV18 [252], NovaraNH16 [321], AlesioNBG14 [119], NovasH12 [324], HachemiGR11 [183], ZeballosQH10 [456], Laborie09 [250], KhayatLR06 [229], AggounB93 [5]	SubulanC22 [391], Teppan22 [403], Mercier-AubinGQ20 [299], ZouZ20 [467], MurinR19 [310], Laborie18a [251], LimBTBB15 [266], WangMD15 [438], EvenSH15a [132], NovasH14 [325], OzturkTHO13 [333], SerraNM12 [378], HeinzB12 [191], TopalogluO11 [409], EdisO11 [125], KelbelH11 [227], ZibranR11a [466], NovasH10 [323], Simonis07 [387], GarganiR07 [149], KrogtLPHJ07 [417], Hooker06 [207], ZeballosH05 [455], QuirogaZH05 [357], Hooker05a [206], LorigeonBB02 [282], VerfaillieL01 [420], RodosekW98 [360]	abs-2402-00459 [317], GurPAE23 [182], CzerniachowskaWZ23 [103], MontemanniD23 [305], IsikYA23 [213], EfthymiouY23 [126], YuraszeckMCCR23 [453], PerezGSL23 [339], AbreuNP23 [110], abs-2312-13682 [340], GeitzGSSW22 [161], ArmstrongGOS22 [15], BoudreaultSLQ22 [80], OujanaAYB22 [332], LiFJZLL22 [262], VlkHT21 [432], Bedhief21 [44], HamPK21 [185], QinWSLS21 [354], abs-2102-08778 [99], HubnerGSV21 [211], WallaceY20 [435], MengZRZL20 [298], BogaerdtW19 [416], YounespourAKE19 [448], abs-1902-09244 [187], Tom19 [408], YangSS19 [447], abs-1902-01193 [8]... (Total: 69)
CPSystems	OR-Tools	abs-2402-00459 [317], LacknerMMWW23 [254], abs-2211-14492 [392], ColT22 [101], MullerMKP22 [309], abs-2102-08778 [99], KovacsTKSG21 [244], LacknerMMWW21 [253], KoehlerBFFHPSSS21 [234], FallahiAC20 [135], ColT19 [100], GayHS15 [153]	EfthymiouY23 [126], BoudreaultSLQ22 [80], GeibingerKKMMW21 [157], BarzegaranZP20 [41], LiuCGM17 [270]	Bit-Monnot23 [63], KimCMLLP23 [231], MontemanniD23 [305], AkramNHRSA23 [7], MontemanniD23a [304], Teppan22 [403], KlankeBYE21 [232], MengZRZL20 [298], GroleazNS20 [179], GalleguillosKSB19 [148], BehrensLM19 [46], abs-1901-07914 [47], YangSS19 [447], PourDERB18 [348], BonfiettiZLM16 [76], ZhouGL15 [463], LombardiM12 [278]
CPSystems	OZ	PrataAN23 [352], NaderiRR23 [313], CzerniachowskaWZ23 [103], IsikYA23 [213], YunusogluY22 [450], WikarekS19 [441], GokgurHO18 [170], TopalogluO11 [409], NovasH10 [323], RuggieroBBMA09 [364], VanczaM01 [419], SchildW00 [370], BeldiceanuC94 [48]	GeitzGSSW22 [161], BourreauGGLT22 [81], AbreuN22 [109], SubulanC22 [391], PohlAK22 [345], FanXG21 [136], GodetLHS20 [168], AstrandJZ20 [23], WessenCS20 [440], abs-1901-07914 [47], LiuLH19 [269], Novas19 [322], BehrensLM19 [46], Hooker17 [208], BridiBLMB16 [83], EdisO11 [125], GrimesH11 [175], ZeballosQH10 [456], BocewiczBB09 [65], LiessM08 [263], SureshMOK06 [394], BeniniBGM06 [57], GodardLN05 [166], MaraveliasG04 [292]	Mehdizadeh-Somarin23 [295], GurPAE23 [182], MullerMKP22 [309], CampeauG22 [88], ZhangJZL22 [457], ArmstrongGOS22 [15], FetgoD22 [139], TouatBT22 [410], abs-2211-14492 [392], LiFJZLL22 [262], PopovicCGNC22 [347], AbreuAPNM21 [108], ArmstrongGOS21 [14], Bedhief21 [44], LacknerMMWW21 [253], QinWSLS21 [354], PandeyS21a [334], WangB20 [436], SacramentoSP20 [365], FallahiAC20 [135], abs-1911-04766 [158], GurEA19 [468], Tom19 [408], abs-1902-09244 [187], FrimodigS19 [145], NishikawaSTT19 [320], GalleguillosKSB19 [148], ArbaouiY18 [13], BenediktSMVH18 [56]... (Total: 74)
CPSystems	SICStus	ArmstrongGOS21 [14], LetortCB15 [261], LetortCB13 [260], LetortBC12 [259]	MossigeGSMC17 [306], SchuttFSW11 [375], QuSN06 [356]	ArmstrongGOS22 [15], PopovicCGNC22 [347], YangSS19 [447], Madi-WambaLOBM17 [287], JelinekB16 [214], BeldiceanuCDP11 [50], TrojetHL11 [412], BartakCS10 [36], SchuttFSW09 [374], BeldiceanuCP08 [51], Geske05 [163], Bartak02 [34], BeldiceanuC02 [49]
CPSystems	Z3	KoehlerBFFHPSSS21 [234], YounespourAKE19 [448], SureshMOK06 [394]	NaderiRR23 [313], VlkHT21 [432], WikarekS19 [441], Zhou97 [462]	ZhangW18 [459], BofillCSV17 [66], BertholdHLMS10 [60], Rodriguez07 [362], Zhou96 [461]

6.6 Concept Type ApplicationAreas

Table 15: Works for Concepts of Type ApplicationAreas

Type	Keyword	High	Medium	Low
ApplicationAreas	COVID		GeibingerKKMMW21 [157]	Mehdizadeh-Somarin23 [295], GurPAE23 [182], OujanaAYB22 [332]
ApplicationAreas	HVAC	LimHTB16 [265], LimBTBB15 [266], GrimesIOS14 [177]		
ApplicationAreas	agriculture			AkramNHRSA23 [7], BenderWS21 [54], HamPK21 [185], QinWSLS21 [354], Astrand0F21 [21], MejiaY20 [296]
ApplicationAreas	aircraft	PohlAK22 [345], WangB20 [436], LombardiM12 [278], FrankK05 [143], ArtiouchineB05 [19]	WangB23 [437], Ham18 [184], Simonis07 [387], SakkoutW00 [368]	PrataAN23 [352], PovedaAA23 [349], abs-1902-09244 [187], LaborieRSV18 [252], Laborie09 [250], KovacsB08 [238], KrogtLPHJ07 [417], MartinPY01 [293], GruianK98 [180], Darby-DowmanLMZ97 [105], Wallace96 [434], Simonis95 [386], SimonisC95 [388]
ApplicationAreas	automotive		YuraszeckMPV22 [452], LimtanyakulS12 [268], SunLYL10 [393], BarlattCG08 [32], SchildW00 [370]	PovedaAA23 [349], NaderiRR23 [313], CzerniachowskaWZ23 [103], AntuoriHHEN21 [12], HubnerGSV21 [211], AbreuAPNM21 [108], KoehlerBFFHPSSS21 [234], VlkHT21 [432], BarzegaranZP20 [41], GeibingerMM19 [159], abs-1911-04766 [158], BonfiettiZLM16 [76], AlesioNBG14 [119], BeniniBGM06 [57], KovacsV06 [243], Wallace96 [434]
ApplicationAreas	cable tree	KoehlerBFFHPSSS21 [234]		
ApplicationAreas	car manufacturing		AntuoriHHEN21 [12]	BeldiceanuC94 [48]
ApplicationAreas	container terminal	QinDCS20 [355], SacramentoSP20 [365]	LaborieRSV18 [252]	abs-2312-13682 [340], PerezGSL23 [339], TouatBT22 [410], WallaceY20 [435], FallahiAC20 [135], CauwelaertDMS16 [92], DejemeppeCS15 [112], NovasH12 [324], LimRX04 [264]
ApplicationAreas	crew-scheduling	PourDERB18 [348]	BourreauGGLT22 [81], Mason01 [294], Touraivane95 [411]	NaderiRR23 [313], WangB23 [437], HeinzNVH22 [196], MokhtarzadehTNF20 [301], TangLWSK18 [398], DoulabiRP16 [124], HachemiGR11 [183], BeldiceanuC02 [49]
ApplicationAreas	dairies			Bartak02 [34], Bartak02a [33]
ApplicationAreas	dairy	EscobetPQPRA19 [130]	PrataAN23 [352]	
ApplicationAreas	datacenter	HermenierDL11 [201]		GalleguillosKSB19 [148], Madi-WambaLOBM17 [287], IfrimOS12 [212], LetortBC12 [259]
ApplicationAreas	datacentre			
ApplicationAreas	day-ahead market			
ApplicationAreas	deep space			
ApplicationAreas	drone	MontemanniD23a [304], MontemanniD23 [305], Ham18 [184]		ShaikhK23 [379], Astrand0F21 [21], AntuoriHHEN21 [12]
ApplicationAreas	earth observation	SquillaciPR23 [390], KucukY19 [249], VerfaillieL01 [420]	BensanaLV99 [59]	PraletLJ15 [351], SimoninAHL15 [385], KelarevaTK13 [226], OddiPCC03 [328]
ApplicationAreas	earth orbit			SquillaciPR23 [390]
ApplicationAreas	electroplating		RodosekW98 [360]	EfthymiouY23 [126], WallaceY20 [435], NovasH12 [324]
ApplicationAreas	emergency service		EvenSH15a [132], TopalogluO11 [409]	EvenSH15 [131], SakkoutW00 [368]
ApplicationAreas	energy-price	GrimesIOS14 [177], IfrimOS12 [212]		PrataAN23 [352], EscobetPQPRA19 [130], BenediktSMVH18 [56], He0GLW18 [188], LimHTB16 [265]
ApplicationAreas	farming			WinterMMW22 [442], Astrand0F21 [21]
ApplicationAreas	forestry	HachemiGR11 [183]		Astrand0F21 [21]
ApplicationAreas	hoist	EfthymiouY23 [126], WallaceY20 [435], RodosekW98 [360]	NovasH12 [324], BonfiettiLBM11 [70]	AstrandJZ18 [22], BonfiettiLBM14 [72], BonfiettiM12 [75], BonfiettiLBM12 [71], LombardiBMB11 [273], KorbaaYG99 [235], PapaB98 [336]

Table 15: Works for Concepts of Type ApplicationAreas

Type	Keyword	High	Medium	Low
ApplicationAreas	medical	ShinBBHO18 [381], WangMD15 [438], TopalogluO11 [409]	HechingH16 [190], DejemeppeD14 [113], RendlPHPR12 [358]	ShaikhK23 [379], AbreuNP23 [110], AkramNHRSA23 [7], IsikYA23 [213], YunusogluY22 [450], AbreuN22 [109], GeibingerKKMMW21 [157], AbreuAPNM21 [108], Bedhief21 [44], FallahiAC20 [135], abs-1902-01193 [8], FrimodigS19 [145], Novas19 [322], GurEA19 [468], YounespourAKE19 [448], HoYCLLCLC18 [203], GedikKEK18 [156], DoulabiRP16 [124], BridiBLMB16 [83], BoothNB16 [77], BonfiettiLBM14 [72], DoulabiRP14 [123], Simonis07 [387]
ApplicationAreas	nurse	GurPAE23 [182], abs-1902-01193 [8], HoYCLLCLC18 [203], ShinBBHO18 [381], WangMD15 [438], RendlPHPR12 [358], Simonis07 [387], Mason01 [294]	OuelletQ22 [331], GeibingerKKMMW21 [157], GeibingerMM21 [160], YounespourAKE19 [448], FrohnerTR19 [146]	PerezGSL23 [339], abs-2312-13682 [340], BourreauGGLT22 [81], FallahiAC20 [135], FrimodigS19 [145], GedikKEK18 [156], NishikawaSTT18a [319], DoulabiRP16 [124], DoulabiRP14 [123], TopalogluO11 [409]
ApplicationAreas	offshore		SubulanC22 [391]	BoudreaultSLQ22 [80]
ApplicationAreas	oven scheduling	LacknerMMWW23 [254], LacknerMMWW21 [253]		ColT22 [101]
ApplicationAreas	patient	GurPAE23 [182], GurEA19 [468], FrimodigS19 [145], YounespourAKE19 [448], ShinBBHO18 [381], HechingH16 [190], DoulabiRP16 [124], WangMD15 [438], DejemeppeD14 [113], RendlPHPR12 [358], TopalogluO11 [409]	GeibingerKKMMW21 [157]	AlfieriGPS23 [9], AbreuAPNM21 [108], MurinR19 [310], HoYCLLCLC18 [203], DoulabiRP14 [123], Simonis07 [387]
ApplicationAreas	perfect-square	BeldiceanuCDP11 [50], BeldiceanuCP08 [51], AggounB93 [5]		
ApplicationAreas	physician	GeibingerKKMMW21 [157], ShinBBHO18 [381]		GurPAE23 [182], FrimodigS19 [145], WangMD15 [438], TopalogluO11 [409]
ApplicationAreas	pipeline	BegB13 [45], LopesCSM10 [280], RuggieroBBMA09 [364], MouraSCL08 [308], MouraSCL08a [307], ErtlK91 [129]	ZouZ20 [467], TangLWSK18 [398], MalikMB08 [291], BeniniBGM06 [57], WolinskiKG04 [445], BeldiceanuC94 [48]	EfthymiouY23 [126], PopovicCGNC22 [347], HanenKP21 [186], NishikawaSTT19 [320], NishikawaSTT18 [318], NishikawaSTT18a [319], LaborieRSV18 [252], Bonfietti16 [69], GilesH16 [164], GoelSHFS15 [169], SimoninAHL15 [385], BonfiettiLBM14 [72], BeniniLMR11 [58], NovasH10 [323], BarlattCG08 [32], KuchcinskiW03 [247], Wolf03 [443], GruianK98 [180], Darby-DowmanLMZ97 [105], SimonisC95 [388]
ApplicationAreas	radiation therapy	FrimodigS19 [145]		
ApplicationAreas	railway	SvancaraB22 [395], PourDERB18 [348], CappartS17 [89], Acuna-AgostMFG09 [4], AronssonBK09 [16], Rodriguez07 [362], Geske05 [163], RodriguezDG02 [361], MartinPY01 [293], LammaMM97 [256]	LaborieRSV18 [252], TangLWSK18 [398], Mason01 [294], BrusoniCLMMT96 [85]	LuoB22 [285], BogaerdtW19 [416], ZhouGL15 [463], AbrilSB05 [3], Wallace96 [434]
ApplicationAreas	real-time pricing		He0GLW18 [188], GrimesIOS14 [177]	LimHTB16 [265]
ApplicationAreas	rectangle-packing	YangSS19 [447], AggounB93 [5]	LuoB22 [285]	MossigeGSMC17 [306], DoulabiRP16 [124], VilimLS15 [430], BeldiceanuCDP11 [50], SchuttW10 [377], BeldiceanuCP08 [51]
ApplicationAreas	robot	IsikYA23 [213], LiFJZLL22 [262], ArmstrongGOS21 [14], KoehlerBFFHPSSS21 [234], WessenCS20 [440], MokhtarzadehTNF20 [301], MurinR19 [310], abs-1901-07914 [47], BehrensLM19 [46], LaborieRSV18 [252], MossigeGSMC17 [306], BoothNB16 [77], NovasH14 [325], NovasH12 [324], BartakSR10 [38], ValleMGT03 [414]	PrataAN23 [352], Mehdizadeh-Somarin23 [295], CzerniachowskaWZ23 [103], TouatBT22 [410], YunusogluY22 [450], OujanaAYB22 [332], Astrand0F21 [21], WallaceY20 [435], WikarekS19 [441], NishikawaSTT19 [320], NishikawaSTT18a [319], NishikawaSTT18 [318], VanczaM01 [419]	abs-2305-19888 [197], MontemanniD23 [305], HeinzNVH22 [196], GeitzGSSW22 [161], MullerMKP22 [309], ColT22 [101], YuraszeckMPV22 [452], HamPK21 [185], ZhangYW21 [458], VlkHT21 [432], Bedhief21 [44], FallahiAC20 [135], MengZRZL20 [298], BenediktMH20 [55], MejiaY20 [296], AstrandJZ20 [23], BarzegaranZP20 [41], Novas19 [322], GokgurHO18 [170], Ham18 [184], ZhangW18 [459], AstrandJZ18 [22], ZarandiKS16 [454], DoulabiRP16 [124], SimoninAHL15 [385], BonfiettiLBM14 [72], LimtanyakulS12 [268], BonfiettiLBM12 [71], BonfiettiLBM11 [70]... (Total: 43)

Type	Keyword	High	Medium	Low
ApplicationAreas	satellite	SquillaciPR23 [390], GodetLHS20 [168], KucukY19 [249], LaborieRSV18 [252], PraletLJ15 [351], KelarevaTK13 [226], VerfaillieL01 [420], BensanaLV99 [59], PembertonG98 [338]	Laborie09 [250], FrankK05 [143]	EfthymiouY23 [126], TouatBT22 [410], Astrand0F21 [21], Pralet17 [350], SimoninAHL15 [385], BessiereHMQW14 [61], HeinzSB13 [195], SimoninAHL12 [384], RuggieroBBMA09 [364], Rodriguez07 [362], OddiPCC03 [328], NuijtenP98 [327]
ApplicationAreas	semiconductor	MalapertN19 [289], NovasH12 [324]	QinWSLS21 [354], GokgurHO18 [170], Davenport10 [106], KrogtLPHJ07 [417]	LacknerMMWW23 [254], YuraszeckMPV22 [452], abs-2211-14492 [392], MullerMKP22 [309], ColT22 [101], ZhangJZL22 [457], FanXG21 [136], LacknerMMWW21 [253], HamPK21 [185], PandeyS21a [334], MengZRZL20 [298], NattafM20 [316], TangB20 [397], Novas19 [322], LaborieRSV18 [252], Ham18 [184], KoschB14 [237]
ApplicationAreas	ship building			
ApplicationAreas	shipping line			QinDCS20 [355], LaborieRSV18 [252], KelarevaTK13 [226]
ApplicationAreas	steel cable			AalianPG23 [1]
ApplicationAreas	steel mill	GaySS14 [155], HeinzSSW12 [193], SchausHMCMD11 [369], HentenryckM08 [200], GarganiR07 [149]		abs-2312-13682 [340], PerezGSL23 [339], DoulabiRP16 [124]
ApplicationAreas	super-computer	BorghesiBLMB18 [78], BridiBLMB16 [83], BartoliniBBLM14 [40]		LuoB22 [285], GalleguillosKSB19 [148]
ApplicationAreas	torpedo	KletzanderM17 [233], GoldwaserS17 [171]		
ApplicationAreas	vaccine			
ApplicationAreas	yard crane		QinDCS20 [355]	WallaceY20 [435]

6.7 Concept Type Industries

Table 16: Works for Concepts of Type Industries

Type	Keyword	High	Medium	Low
Industries	aerospace industry			SchildW00 [370]
Industries	agricultural industry	WinterMMW22 [442]		
Industries	automotive industry		LimtanyakulS12 [268]	CzerniachowskaWZ23 [103], AntuoriHHEN21 [12], BonfiettiZLM16 [76], SchildW00 [370], Wallace96 [434]
Industries	chemical industry		Timpe02 [407]	LaborieRSV18 [252], GilesH16 [164], LombardiM12 [278], PoderBS04 [344]
Industries	chemical processing industry			GilesH16 [164]
Industries	control system industry			BonfiettiZLM16 [76]
Industries	electricity industry			PopovicCGNC22 [347]
Industries	electronics industry			LacknerMMWW23 [254], LacknerMMWW21 [253]
Industries	food industry			OujanaAYB22 [332], GroleazNS20a [178], GroleazNS20 [179], EscobetPQPRA19 [130], HachemiGR11 [183], SimonisC95 [388], Simonis95 [386]
Industries	food-processing industry			KlankeBYE21 [232], abs-1902-09244 [187]
Industries	manufacturing industry			PrataAN23 [352], CzerniachowskaWZ23 [103], LacknerMMWW23 [254], WinterMMW22 [442], YuraszeckMPV22 [452], FanXG21 [136], LacknerMMWW21 [253], Mercier-AubinGQ20 [299], TangB20 [397], EscobetPQPRA19 [130], GedikKEK18 [156]
Industries	mineral industry			Astrand0F21 [21], AstrandJZ20 [23]
Industries	mining industry		AalianPG23 [1]	abs-2402-00459 [317], CampeauG22 [88], Astrand0F21 [21], AstrandJZ20 [23]
Industries	oil industry			AbreuNP23 [110], AbreuAPNM21 [108], LopesCSM10 [280]
Industries	packaging industry			ArmstrongGOS21 [14]
Industries	petro-chemical industry			LaborieRSV18 [252], GilesH16 [164]
Industries	pharmaceutical industry			YuraszeckMCCR23 [453], CzerniachowskaWZ23 [103], GeibingerKKMMW21 [157], NovaraNH16 [321]
Industries	potash industry			Astrand0F21 [21], AstrandJZ20 [23], AstrandJZ18 [22]
Industries	power industry			FrostD98 [147]
Industries	process industry		Timpe02 [407]	HeinzSSW12 [193], Wallace96 [434]
Industries	retail industry			ChapadosJR11 [94]
Industries	services industry			DoomsH08 [122]
Industries	ship repair industry			BoudreaultSLQ22 [80]
Industries	steel industry		DavenportKRSH07 [107]	LacknerMMWW23 [254], KimCMLLP23 [231], IsikYA23 [213], OujanaAYB22 [332], LacknerMMWW21 [253], abs-1902-09244 [187], KletzanderM17 [233], GoldwaserS17 [171], HeinzSSW12 [193], SchausHMCMD11 [369], GrimesH10 [174], GarganiR07 [149]
Industries	steel making industry			
Industries	textile industry	Mercier-AubinGQ20 [299]		BessiereHMQW14 [61]
Industries	tourism industry			LiuCGM17 [270]

6.8 Concept Type Benchmarks

Table 17: Works for Concepts of Type Benchmarks

Type	Keyword	High	Medium	Low
Benchmarks	CSPlib	SchausHMCMD11 [369], GarganiR07 [149]	LaborieRSV18 [252], MossigeGSMC17 [306], NovaraNH16 [321], HeinzSSW12 [193]	LiuLH19 [269], GelainPRVW17 [162], GaySS14 [155], RendlPHPR12 [358], HentenryckM08 [200]
Benchmarks	Roadef		LetortCB15 [261], LetortCB13 [260], LetortBC12 [259]	CzerniachowskaWZ23 [103], HanenKP21 [186], Polo-MejiaALB20 [346], MalapertN19 [289], Tesch18 [405], OuelletQ18 [330], Tesch16 [404], Acuna-AgostMFG09 [4]
Benchmarks	benchmark	IsikYA23 [213], TardivoDFMP23 [399], AlfieriGPS23 [9], JuvinHHL23 [217], ShaikhK23 [379], LacknerMMWW23 [254], PovedaAA23 [349], Bit-Monnot23 [63], NaderiRR23 [313], AbreuNP23 [110], TasselGS23 [400], abs-2306-05747 [401], YuraszeckMCCR23 [453], BoudreaultSLQ22 [80], ZhangJZL22 [457], OuelletQ22 [331], abs-2211-14492 [392], ColT22 [101], TouatBT22 [410], AbreuN22 [109], MullerMKP22 [309], LiFJZLL22 [262], WinterMMW22 [442], Teppan22 [403], HamPK21 [185], abs-2102-08778 [99], KoehlerBFFHPSSS21 [234], PandeyS21a [334], LacknerMMWW21 [253]... (Total: 70)	abs-2402-00459 [317], AkramNHRSA23 [7], YuraszeckMC23 [451], MontemanniD23a [304], KameugneFND23 [222], abs-2305-19888 [197], FetgoD22 [139], OujanaAYB22 [332], BourreauGGLT22 [81], HeinzNVH22 [196], AbreuAPNM21 [108], KovacsTKSG21 [244], MejiaY20 [296], SacramentoSP20 [365], BenediktMH20 [55], GroleazNS20 [179], BadicaBI20 [24], MengZRZL20 [298], Novas19 [322], NishikawaSTT19 [320], GeibingerMM19 [159], ArbaouiY18 [13], NishikawaSTT18 [318], FahimiOQ18 [133], RiahiNS018 [359], MossigeGSMC17 [306], BofillCSV17 [66], SzerediS16 [396], Bonfietti16 [69]... (Total: 62)	PrataAN23 [352], CzerniachowskaWZ23 [103], MontemanniD23 [305], EfthymiouY23 [126], KimCMLLP23 [231], SquillaciPR23 [390], SvancaraB22 [395], JungblutK22 [216], PohlAK22 [345], SubulanC22 [391], YuraszeckMPV22 [452], YunusogluY22 [450], ArmstrongGOS22 [15], Astrand0F21 [21], HubnerGSV21 [211], KlankeBYE21 [232], VlkHT21 [432], ArmstrongGOS21 [14], LunardiBLRV20 [283], NattafM20 [316], AstrandJZ20 [23], QinDCS20 [355], ZouZ20 [467], abs-1901-07914 [47], BogaerdtW19 [416], FrohnerTR19 [146], MalapertN19 [289], KucukY19 [249], MurinR19 [310]... (Total: 96)
Benchmarks	bitbucket		TardivoDFMP23 [399]	He0GLW18 [188], CappartS17 [89], CauwelaertDMS16 [92], GayHLS15 [152], GayHS15a [154], DejemeppeCS15 [112], GayHS15 [153], DejemeppeD14 [113], HoundjiSWD14 [210]
Benchmarks	generated instance	IsikYA23 [213], LuoB22 [285], abs-1911-04766 [158]	abs-2312-13682 [340], PerezGSL23 [339], MejiaY20 [296], GodetLHS20 [168], Madi-WambaB16 [286], KelbelH11 [227], SchausHMCMD11 [369]	abs-2402-00459 [317], abs-2305-19888 [197], EfthymiouY23 [126], BoudreaultSLQ22 [80], ColT22 [101], YuraszeckMPV22 [452], HeinzNVH22 [196], YunusogluY22 [450], abs-2211-14492 [392], TouatBT22 [410], abs-2102-08778 [99], AbreuAPNM21 [108], GeibingerMM21 [160], HanenKP21 [186], AbohashimaEG21 [2], Astrand0F21 [21], MokhtarzadehTNF20 [301], LunardiBLRV20 [283], BenediktMH20 [55], GeibingerMM19 [159], MalapertN19 [289], YangSS19 [447], KucukY19 [249], BenediktSMVH18 [56], PourDERB18 [348], GoldwaserS17 [171], MossigeGSMC17 [306], BonfiettiZLM16 [76], DoulabiRP16 [124]... (Total: 40)
Benchmarks	github	KoehlerBFFHPSSS21 [234]	TardivoDFMP23 [399], PovedaAA23 [349], JungblutK22 [216], BoudreaultSLQ22 [80], HamPK21 [185], GodetLHS20 [168], BenediktMH20 [55], LunardiBLRV20 [283]	abs-2402-00459 [317], YuraszeckMC23 [451], SquillaciPR23 [390], JuvinHHL23 [217], YuraszeckMCCR23 [453], Bit-Monnot23 [63], abs-2306-05747 [401], NaderiRR23 [313], TasselGS23 [400], LuoB22 [285], OuelletQ22 [331], ColT22 [101], YuraszeckMPV22 [452], GeitzGSSW22 [161], MullerMKP22 [309], KovacsTKSG21 [244], GeibingerMM21 [160], VlkHT21 [432], AbohashimaEG21 [2], WangB20 [436], Polo-MejiaALB20 [346], FallahiAC20 [135], ColT19 [100], BehrensLM19 [46], BadicaBIL19 [25], abs-1901-07914 [47], abs-1911-04766 [158], MurinR19 [310], BenediktSMVH18 [56]... (Total: 35)
Benchmarks	gitlab		HeinzNVH22 [196]	abs-2305-19888 [197], BoudreaultSLQ22 [80], AntuoriHHEN21 [12]
Benchmarks	industrial instance	LuoB22 [285]	BonfiettiZLM16 [76], BonfiettiLBM14 [72]	TasselGS23 [400], EfthymiouY23 [126], PovedaAA23 [349], abs-2306-05747 [401], OujanaAYB22 [332], Mercier-AubinGQ20 [299], NattafM20 [316], GroleazNS20 [179], MalapertN19 [289], BofillGSV15 [68], BofillEGPSV14 [67], BonfiettiM12 [75], LombardiBMB11 [273], BonfiettiLBM11 [70]

Table 17: Works for Concepts of Type Benchmarks

Type	Keyword	High	Medium	Low
Benchmarks	industrial partner	BoudreaultSLQ22 [80]	LacknerMMWW23 [254], ArmstrongGOS21 [14]	WinterMMW22 [442], VlkHT21 [432], LacknerMMWW21 [253], GroleazNS20a [178], Mercier-AubinGQ20 [299], abs-1911-04766 [158], GeibingerMM19 [159], MossigeGSMC17 [306], LimtanyakulS12 [268], KovacsV06 [243], KovacsV04 [242]
Benchmarks	industry partner	BurtLPS15 [86]		WinterMMW22 [442], LuoB22 [285], ArmstrongGOS21 [14], abs-1902-09244 [187]
Benchmarks	instance generator	LacknerMMWW23 [254], LacknerMMWW21 [253]		abs-2402-00459 [317], ArmstrongGOS21 [14], abs-1911-04766 [158], GoldwaserS17 [171], YoungFS17 [449], BeniniLMR11 [58], RuggieroBBMA09 [364], LombardiM09 [274], HeipckeCCS00 [198]
Benchmarks	random instance	LacknerMMWW21 [253], WallaceY20 [435]	LacknerMMWW23 [254], EfthymiouY23 [126], WangB23 [437], LetortCB15 [261], KelbelH11 [227]	Mehdizadeh-Somarin23 [295], OuelletQ22 [331], abs-2211-14492 [392], MullerMKP22 [309], VlkHT21 [432], KlankeBYE21 [232], HanenKP21 [186], LunardiBLRV20 [283], BenediktMH20 [55], BenediktSMVH18 [56], FahimiOQ18 [133], Hooker17 [208], MossigeGSMC17 [306], CappartS17 [89], Madi-WambaB16 [286], KameugneFSN14 [224], DerrienP14 [117], DerrienPZ14 [118], LetortCB13 [260], LimtanyakulS12 [268], BillautHL12 [62], LetortBC12 [259], BartakS11 [37], Hooker06 [207], Hooker05 [205], ArtiouchineB05 [19], Hooker04 [204], BeldiceanuC02 [49]
Benchmarks	real-life	GurPAE23 [182], SubulanC22 [391], WinterMMW22 [442], HubnerGSV21 [211], QinDCS20 [355], GurEA19 [468], WangMD15 [438], BartakSR10 [38], BartakCS10 [36], Bartak02a [33], MartinPY01 [293]	LacknerMMWW23 [254], OujanaAYB22 [332], Astrand0F21 [21], LacknerMMWW21 [253], KlankeBYE21 [232], FallahiAC20 [135], abs-1911-04766 [158], PourDERB18 [348], BartakV15 [39], GaySS14 [155], LimtanyakulS12 [268], RuggieroBBMA09 [364], Tsang03 [413], NuijtenP98 [327], SimonisC95 [388], DincbasSH90 [121]	PrataAN23 [352], EfthymiouY23 [126], PovedaAA23 [349], IsikYA23 [213], GeitzGSSW22 [161], CampeauG22 [88], LuoB22 [285], ColT22 [101], Teppan22 [403], BoudreaultSLQ22 [80], YunusogluY22 [450], YuraszeckMPV22 [452], GeibingerMM21 [160], Bedhief21 [44], abs-2102-08778 [99], WallaceY20 [435], GodetLHS20 [168], SacramentoSP20 [365], AstrandJZ20 [23], GeibingerMM19 [159], YounespourAKE19 [448], MurinR19 [310], GokgurHO18 [170], Laborie18a [251], BorghesiBLMB18 [78], RiahiNS018 [359], NishikawaSTT18a [319], GelainPRVW17 [162], CappartS17 [89]... (Total: 65)
Benchmarks	real-world	abs-2305-19888 [197], HeinzNVH22 [196], YunusogluY22 [450], ColT22 [101], KoehlerBFFHPSSS21 [234], GeibingerMM21 [160], MokhtarzadehTNF20 [301], abs-1911-04766 [158], GeibingerMM19 [159], abs-1902-09244 [187], FrohnerTR19 [146], MelgarejoLS15 [6], EvenSH15 [131], EvenSH15a [132], RendlPHPR12 [358], MouraSCL08a [307]	PrataAN23 [352], IsikYA23 [213], abs-2306-05747 [401], AbreuNP23 [110], TasselGS23 [400], AalianPG23 [1], WangB23 [437], YuraszeckMCCR23 [453], SvancaraB22 [395], OujanaAYB22 [332], LuoB22 [285], MullerMKP22 [309], ArmstrongGOS21 [14], WessenCS20 [440], TangB20 [397], WallaceY20 [435], AstrandJZ20 [23], ParkUJR19 [337], YounespourAKE19 [448], FrimodigS19 [145], RiahiNS018 [359], HoYCLLCLC18 [203], LaborieRSV18 [252], PourDERB18 [348], ShinBBHO18 [381], HechingH16 [190], BonfiettiZLM16 [76], MurphyMB15 [311], KelarevaTK13 [226]... (Total: 34)	abs-2402-00459 [317], KimCMLLP23 [231], abs-2312-13682 [340], PovedaAA23 [349], JuvinHL23 [218], Bit-Monnot23 [63], TardivoDFMP23 [399], CzerniachowskaWZ23 [103], PerezGSL23 [339], ShaikhK23 [379], BourreauGGLT22 [81], CampeauG22 [88], JungblutK22 [216], AbreuN22 [109], ArmstrongGOS22 [15], SubulanC22 [391], FetgoD22 [139], PohlAK22 [345], BoudreaultSLQ22 [80], GeitzGSSW22 [161], GeibingerKKMMW21 [157], AbohashimaEG21 [2], KovacsTKSG21 [244], Astrand0F21 [21], abs-2102-08778 [99], AbreuAPNM21 [108], HillTV21 [202], BadicaBI20 [24], SacramentoSP20 [365]... (Total: 92)
Benchmarks	supplementary material	MejiaY20 [296]	MontemanniD23 [305]	JuvinHHL23 [217], abs-2306-05747 [401], TasselGS23 [400], WinterMMW22 [442], ColT22 [101], BoudreaultSLQ22 [80], YunusogluY22 [450], KovacsTKSG21 [244], ArmstrongGOS21 [14], AntuoriHHEN21 [12], LacknerMMWW21 [253], MengZRZL20 [298]
Benchmarks	zenodo	LacknerMMWW23 [254], SacramentoSP20 [365]		KimCMLLP23 [231], WinterMMW22 [442], ArmstrongGOS21 [14]

6.9 Concept Type Algorithms

Table 18: Works for Concepts of Type Algorithms

Type	Keyword	High	Medium	Low
Algorithms	bi-partite matching			Simonis07 [387], Kumar03 [248]
Algorithms	edge-finder	KameugneFND23 [222], FetgoD22 [139], GingrasQ16 [165], KameugneFSN14 [224], BaptisteP00 [30]	OuelletQ13 [329], KelbelH11 [227], PapaB98 [336]	BaptisteB18 [27], BonfiettiZLM16 [76], GuSS13 [181], SchuttFSW11 [375], SchuttFSW09 [374], ValleMGT03 [414], SakkoutW00 [368], BaptisteP97 [29], Zhou97 [462]
Algorithms	edge-finding	KameugneFND23 [222], JuvinHHL23 [217], TardivoDFMP23 [399], OuelletQ22 [331], FetgoD22 [139], YangSS19 [447], GokgurHO18 [170], BaptisteB18 [27], FahimiOQ18 [133], KreterSS17 [246], Kameugne15 [220], GayHS15a [154], KameugneFSN14 [224], OuelletQ13 [329], SchuttFS13a [372], SchuttFSW11 [375], KameugneFSN11 [223], ClercqPBJ11 [97], Vilim11 [427], Vilim09 [425], ArtiouchineB05 [19], VilimBC05 [429], Hooker05 [205], VilimBC04 [428], BaptisteP00 [30], FocacciLN00 [140], PapaB98 [336], BaptisteP97 [29], BeckDF97 [42]	BoudreaultSLQ22 [80], LaborieRSV18 [252], Tesch18 [405], GingrasQ16 [165], CauwelaertDMS16 [92], LetortCB15 [261], DejemeppeCS15 [112], LetortCB13 [260], LombardiM12 [278], LetortBC12 [259], BartakSR10 [38], LiessM08 [263], HoeveGSL07 [418], MonetteDD07 [302], Vilim04 [423], Bartak02 [34], SchildW00 [370], Zhou97 [462]	CampeauG22 [88], WallaceY20 [435], OuelletQ18 [330], NattafAL17 [315], Tesch16 [404], SialaAH15 [383], GayHLS15 [152], DerrienP14 [117], GuSS13 [181], OzturkTHO13 [333], HeinzSB13 [195], LimtanyakulS12 [268], BeldiceanuCDP11 [50], KelbelH11 [227], GrimesH11 [175], KovacsB11 [239], SchuttW10 [377], GrimesH10 [174], Vilim09a [426], abs-0907-0939 [342], GrimesHM09 [176], BeldiceanuCP08 [51], MalikMB08 [291], KeriK07 [228], ArtiguesBF04 [17], Sadykov04 [366], KovacsV04 [242], Wolf03 [443], Vilim03 [422]... (Total: 39)
Algorithms	energetic reasoning	TardivoDFMP23 [399], FetgoD22 [139], OuelletQ22 [331], HanenKP21 [186], OuelletQ18 [330], Tesch18 [405], NattafAL17 [315], Tesch16 [404], GayHS15a [154], NattafAL15 [314], DerrienP14 [117], SchuttFS13a [372], LimtanyakulS12 [268], HeinzS11 [194], Vilim11 [427]	KameugneFND23 [222], KameugneFGOQ18 [221], SchuttFS13 [373]	IsikYA23 [213], BoudreaultSLQ22 [80], ArmstrongGOS21 [14], YangSS19 [447], GokgurHO18 [170], Laborie18a [251], BofillCSV17 [66], GingrasQ16 [165], LetortCB15 [261], KameugneFSN14 [224], LetortCB13 [260], OuelletQ13 [329], LombardiM12 [278], LahimerLH11 [255], ClercqPBJ11 [97], BeldiceanuCDP11 [50], abs-0907-0939 [342], Vilim09 [425], Vilim09a [426], Limtanyakul07 [267], WolfS05 [444], BaptisteP00 [30], PapaB98 [336]
Algorithms	max-flow		LopesCSM10 [280], MouraSCL08 [308], Muscettola02 [312]	FanXG21 [136], Kumar03 [248]
Algorithms	not-first	KameugneFND23 [222], KameugneFGOQ18 [221], FahimiOQ18 [133], GayHS15a [154], SchuttFSW11 [375], VilimBC05 [429], ArtiouchineB05 [19]	TardivoDFMP23 [399], FetgoD22 [139], GokgurHO18 [170], OuelletQ18 [330], Kameugne15 [220], DejemeppeCS15 [112], KameugneFSN14 [224], OuelletQ13 [329], SchuttW10 [377], BartakSR10 [38], MonetteDD07 [302], VilimBC04 [428], Wolf03 [443]	JuvinHHL23 [217], OuelletQ22 [331], BoudreaultSLQ22 [80], Tesch16 [404], CauwelaertDMS16 [92], LimtanyakulS12 [268], KameugneFSN11 [223], Vilim09 [425], SourdN00 [389]
Algorithms	not-last	TardivoDFMP23 [399], KameugneFND23 [222], FahimiOQ18 [133], KameugneFGOQ18 [221], OuelletQ18 [330], GayHS15a [154], SchuttW10 [377], ArtiouchineB05 [19], Vilim05 [424], VilimBC05 [429], Vilim04 [423], Wolf03 [443]	FetgoD22 [139], GokgurHO18 [170], Tesch18 [405], Kameugne15 [220], DejemeppeCS15 [112], KameugneFSN14 [224], SchuttFS13a [372], OuelletQ13 [329], SchuttFSW11 [375], Vilim11 [427], KameugneFSN11 [223], BartakSR10 [38], MonetteDD07 [302], VilimBC04 [428]	JuvinHHL23 [217], BoudreaultSLQ22 [80], GeitzGSSW22 [161], OuelletQ22 [331], GodetLHS20 [168], YangSS19 [447], CauwelaertDMS16 [92], Tesch16 [404], LimtanyakulS12 [268], GrimesHM09 [176], MonetteDH09 [303], Vilim09a [426], Vilim09 [425], BocewiczBB09 [65], WolfS05 [444], Vilim03 [422]
Algorithms	sweep	Tesch18 [405], Tesch16 [404], BonfiettiZLM16 [76], SimoninAHL15 [385], NattafAL15 [314], LetortCB15 [261], GayHS15 [153], DerrienPZ14 [118], LetortCB13 [260], SimoninAHL12 [384], LetortBC12 [259], ClercqPBJ11 [97], abs-0907-0939 [342], BeldiceanuP07 [52], Wolf03 [443], BeldiceanuC02 [49]	FahimiOQ18 [133], GayHS15a [154], AronssonBK09 [16], PoderB08 [343], WolfS05 [444]	KameugneFND23 [222], TardivoDFMP23 [399], GeitzGSSW22 [161], FetgoD22 [139], OuelletQ22 [331], FallahiAC20 [135], KameugneFGOQ18 [221], Madi-WambaLOBM17 [287], GingrasQ16 [165], BartakV15 [39], EvenSH15 [131], EvenSH15a [132], DerrienP14 [117], BonfiettiLBM14 [72], GaySS14 [155], OuelletQ13 [329], BeldiceanuCDP11 [50], Vilim11 [427], LombardiM10a [275], BartakSR10 [38], BeldiceanuCP08 [51], KovacsB08 [238], Simonis07 [387], VilimBC05 [429], Vilim04 [423]

Table 18: Works for Concepts of Type Algorithms

Type	Keyword	High	Medium	Low
Algorithms	time-tabling	TardivoDFMP23 [399], ShaikhK23 [379], OuelletQ22 [331], DemirovicS18 [115], FahimiOQ18 [133], GayHS15a [154], OuelletQ13 [329], HeinzS11 [194], ElkhyariGJ02a [128], Wallace96 [434]	WallaceY20 [435], abs-1902-01193 [8], Tesch18 [405], OuelletQ18 [330], GayHS15 [153], BofillGSV15 [68], Vilim11 [427], Bartak02 [34]	PrataAN23 [352], KameugneFND23 [222], LacknerMMWW23 [254], AbreuNP23 [110], TouatBT22 [410], SvancaraB22 [395], FetgoD22 [139], GeibingerMM21 [160], MokhtarzadehTNF20 [301], GodetLHS20 [168], LiuLH19 [269], abs-1911-04766 [158], KucukY19 [249], GeibingerMM19 [159], KameugneFGOQ18 [221], AstrandJZ18 [22], BaptisteB18 [27], YoungFS17 [449], ZarandiKS16 [454], Tesch16 [404], LimBTBB15 [266], WangMD15 [438], VilimLS15 [430], GayHLS15 [152], BofillEGPSV14 [67], BonfiettiLBM14 [72], KameugneFSN14 [224], SchuttFS13 [373], HeinzSB13 [195]... (Total: 43)

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A Papers and Articles Missing a Local Copy

Table 19: PAPER without Local Copy

Key	URL	Authors	Title	Year	Conference /Journal	Cite
FriedrichFMRSST14	FriedrichFMRSST14	G. Friedrich, M. Frühstück, V. Mersheeva, A. Ryabokon, M. Sander, A. Starzacher, E. Teppan	Representing Production Scheduling with Constraint Answer Set Programming	2014	GOR 2014	[144]
VillaverdeP04	VillaverdeP04	K. Villaverde, E. Pontelli	An Investigation of Scheduling in Distributed Constraint Logic Programming	2004	ISCA 2004	[431]
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	1997	PACT 1997	[79]
PapeB97	PapeB97	Claude Le Pape, P. Baptiste	A Constraint Programming Library for Preemptive and Non-Preemptive Scheduling	1997	PACT 1997	[335]
JourdanFRD94	JourdanFRD94	J. Jourdan, F. Fages, D. Rozzonelli, A. Demeure	Data Alignment and Task Scheduling On Parallel Machines Using Concurrent Constraint Model-based Programming	1994	ILPS 1994	[215]
Wallace94	Wallace94	M. Wallace	Applying Constraints for Scheduling	1994	Constraint Programming 1994	[433]

Table 20: ARTICLE without Local Copy

Key	URL	Authors	Title	Year	Conference /Journal	Cite
FarsiTM22	FarsiTM22	A. Farsi, S. Ali Torabi, M. Mokhtarzadeh	Integrated surgery scheduling by constraint programming and meta-heuristics	2022	International Journal of Management Science and Engineering Management	[137]
Fatemi-AnarakiMFN22	Fatemi-AnarakiMFN22	S. Fatemi-Anaraki, R. Tavakkoli-Moghaddam, M. Foumani, B. Vahedi-Nouri	Scheduling of Multi-Robot Job Shop Systems in Dynamic Environments: Mixed-Integer Linear Programming and Constraint Programming Approaches	2022	Omega	[138]
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	2022	Int. J. Prod. Res.	[380]
AlizdehS20	AlizdehS20	S. Alizdeh, S. Saeidi	Fuzzy project scheduling with critical path including risk and resource constraints using linear programming	2020	Int. J. Adv. Intell. Paradigms	[10]
Tay92	Tay92	David B. H. Tay	COPS: A Constraint Programming Approach to Resource-Limited Project Scheduling	1992	Comput. J.	[402]

B Papers and Articles Without Recognized Concepts

Table 21: PAPER without Concepts

Key	Local Copy	Authors	Title	Year	Conference /Journal	Cite	Pages
BaptisteLV92	Yes	P. Baptiste, B. Legeard, C. Varnier	Hoist scheduling problem: an approach based on constraint logic programming	1992	ICRA 1992	[31]	6

Table 22: ARTICLE without Concepts

Key	Local Copy	Authors	Title	Year	Conference /Journal	Cite	Pages
KorbaaYG00	Yes	O. Korbaa, P. Yim, J. Gentina	Solving Transient Scheduling Problems with Constraint Programming	2000	Eur. J. Control	[236]	10
LopezAKYG00	Yes	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 J.-C. Gentina	2000	Eur. J. Control	[281]	4

C Unmatched Concepts

Table 23: Unmatched Concepts

Type	Name	CaseSensitive	Revision
ProgLanguages	Julia		0
Industries	steel making industry		0
ApplicationAreas	datacentre		0
ApplicationAreas	day-ahead market		0
ApplicationAreas	deep space		0
ApplicationAreas	ship building		0
ApplicationAreas	vaccine		0
Classification	Modified Generalized Assignment Problem		0
Classification	PP-MS-MMRCPSP	Y	1
Classification	Pre-emptive Job-Shop scheduling Problem		0
Classification	Resource-constrained Project Scheduling Problem with Discounted Cashflow		0
Classification	SMSDP	Y	1
Classification	Steel-making and continuous casting		0
Concepts	Allen's algebra		0
Concepts	make to stock		1