CP Papers on Car Sequencing

Helmut Simonis and Cemalettin Öztürk

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1 Introduction

This document shows the result of a survey on "Constraint Programming and Scheduling", which tries to find and classify all publications on the combination of these two concepts. It is based on a manually collected bibfile containing reference to relevant papers and articles, and on an automatic and manual analysis of local copies of the cited papers. For copyright reasons, we are obviously not able to distribute the collected copies, but we provide links to the original sources of the files.

We identify the papers by a key which is the last name of the first author, the first character of the last names of all other authors, and a two digit year code for the date of publication. If multiple works would define the same key, we differentiate by adding a suffix "a", "b", etc, to the second and subsequent works found.

Most of the content of this document is generated by a Java program that parses the bib files, adds any manually extracted information, and which then extracts concept occurrences from the local copies of the works. It then produces tables and other LaTeX artifacts that are included in a manually defined top-level document.

To add new works, first add bibtex entries for each work in the main `overview/bib.bib` file, then add local copies of the pdf of the work to the `overview/works/` directory, using the key of the bibtex entry as the file name (plus extension .pdf), and then run the main Java program `org.insightcentre.pthg24.JfxApp` to consolidate the information and extract the relevant concepts. Finally, run `pdflatex` on the `overview/scheduling.tex` file to produce this pdf document. Manually extracted information for the files can be added in the `imports/manual.csv` file. New concepts can be added in the file `imports/concepts.json`, new concept types need to be directly defined in the Java code.

We start the document by providing a table of all defined keys in the bib file in alphabetical order. This table can be helpful to see if a candidate paper is already in the survey, it suffices to see if the key is already present, and matches the authors, title and origin of the candidate paper. In the table link given by the key points to the local copy of the file, while the citation number links to the bibliography entry. That entry typically also contains a link to the original source of the paper.

This document heavily depends on the use of hyper links in the document, it has been tested with Acrobat Reader, other pdf reader may not use links in the same way.

Table 1: Key Overview (Total: 29)

1	2	3	4	5	6
ArtiguesHM0W14 [1]	BoysenFS09 [2]	ButaruH05 [3]	DincbasSH88 [4]	Gent98 [5]	GolleRB14 [6]
GottliebPS03 [7]	HindiP94 [8]	HoevePRS06 [23]	HoevePRS09 [24]	Kis04 [9]	Mayer-EichbergerW13 [10]
MazurN15 [11]	MoyaCB19 [12]	OzturkTHO13 [13]	ParrelloK86 [14]	PerronS04 [15]	ReginP97 [16]
Schaus09 [17]	Siala15 [18]	SialaHH14 [19]	SialaHH155 [20]	SolnonCNA08 [21]	ThiruvadyME11 [22]
WarwickT95 [25]	WinterM21 [26]	YavuzE18 [27]	YuLZCLW22 [28]	ZhangGWH17 [29]	

2 Conference Paper List

This section presents the information for all conference papers included in the survey. For space reasons, not all information about the papers can be presented in a single table, we therefore split the data into three parts. The first part contains the main bibliographical information for the paper. The paper are sorted by year of publication (newest first), and then alphabetically by key.

The key contains a hyperlink to the original source URL of the paper. You may have to navigate manually to download the actual paper content, and you may be unable to access the paper completely if it is behind a paywall for which you (or your organization) do not have access.

We then list the authors of the paper, in the other given in the bibtex file, abbreviating first names for space where we can identify them. Note that names with non-latin characters are not handled by latex. We use the form that is given in the bibtex file, but have excluded entries that cause latex to fail.

We then give the title of the publication, using the original capitalization of the title entry in the bibtex entry, which may differ from the format shown in the bibliography. We then (column LC) provide a link to a local copy, if it is present, and a link to the bibliography entry of the paper. We also show the year of publication, and the conference where the paper was published, using a short form abbreviation of the conference. This relies on a matching routine in the Java code to find the short title, new conference series may require an additional entry in `ImportBibtex.java` to work properly. Finally we list the number of pages of the paper, this information is using the bibtex entry where possible, otherwise uses `pdfinfo` to extract the actual number of pages from the local copy. The final columns b and c provide links to the corresponding tables of extracted concepts and manual information. Note that the links to typically show the correct page, not do not necessarily scroll to the correct line in the table.

2.1 Papers from bibtex

Table 2: Works from bibtex (Total 9)

Key Source	Authors	Title	LC	Cite	Year	Conference /Journal /School	Pages	Nr Cites	Nr Refs	b	c
ArtiguesHM0W14 ArtiguesHM0W14	C. Artigues, E. Hebrard, V. Mayer-Eichberger, M. Siala, T. Walsh	SAT and Hybrid Models of the Car Sequencing Problem	Yes	[1]	2014	CPAIOR 2014	16	2	16	10	18
Mayer-EichbergerW13 Mayer-EichbergerW13	V. Mayer-Eichberger, T. Walsh	SAT Encodings for the Car Sequencing Problem	Yes	[10]	2013	SAT 2013	13	0	0	15	19
ThiruvadyME11 ThiruvadyME11	Dhananjay Raghavan Thiruvady, B. Meyer, A. Ernst	Car sequencing with constraint-based ACO	No	[22]	2011	GECCO 2011	8	0	0	No	20
HoevePRS06 HoevePRS06	Willem Jan van Hoeve, G. Pesant, L. Rousseau, A. Sabharwal	Revisiting the Sequence Constraint	Yes	[23]	2006	CP 2006	15	33	7	14	21
ButaruH05 ButaruH05	M. Butaru, Z. Habbas	The car-sequencing problem as n-ary CSP–Sequential and parallel solving	Yes	[3]	2005	Australian Joint Conference on Artificial Intelligence 2005	4	0	0	11	22
PerronS04 PerronS04	L. Perron, P. Shaw	Combining Forces to Solve the Car Sequencing Problem	Yes	[15]	2004	CPAIOR 2004	15	17	9	16	23
GottliebPS03 GottliebPS03	J. Gottlieb, M. Puchta, C. Solnon	A Study of Greedy, Local Search, and Ant Colony Optimization Approaches for Car Sequencing Problems	Yes	[7]	2003	EvoWorkshop 2003	12	46	5	13	24
ReginP97 ReginP97	J. Régin, J. Puget	A Filtering Algorithm for Global Sequencing Constraints	Yes	[16]	1997	CP 1997	15	53	3	17	25
DincbasSH88 DincbasSH88	M. Dincbas, H. Simonis, Pascal Van Hentenryck	Solving the Car-Sequencing Problem in Constraint Logic Programming	Yes	[4]	1988	ECAI 1988	6	0	0	12	26

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
ArtiguesHM0W14 [1]	16	activity, lazy clause generation, order		cumulative, Cardinality constraint, Among constraint		Mistral			github, CSPlib, Roadef, benchmark		1	18
ButaruH05 [3]	4	task, order, job-shop, machine, job			C++	Ilog Solver			CSPlib		5	22
DincbasSH88 [4]	6	job, order, job-shop, precedence, machine, resource, task, scheduling, distributed		circuit, Disjunctive constraint, disjunctive	Prolog	OPL, CHIP			real-life		9	26
GottliebPS03 [7]	12	order, scheduling, machine		cycle					real-world, benchmark, CSPlib		7	24
HoevePRS06 [23]	15	order, transportation		Cardinality constraint, Regular constraint, Among constraint		CHIP, Ilog Solver	nurse		real-life		4	21
Mayer-EichbergerW13 [10]	13	scheduling, task		Atmost constraint, Cardinality constraint, cumulative					CSPlib, benchmark, github		2	19
PerronS04 [15]	15	scheduling, job-shop, order, resource, job				OZ, Ilog Scheduler			generated instance		6	23
ReginP97 [16]	15	resource, machine, order, scheduling		cumulative, Cardinality constraint		Ilog Scheduler, Ilog Solver, CHIP	automotive, crew-scheduling		random instance, benchmark, real-life	time-tabling, edge-finder	8	25

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	Related To	Classification	Constraints	a	b
ArtiguesHM0W14 ArtiguesHM0W14 [1]	SAT and Hybrid Models of the Car Sequencing Problem		github, CSPlib, Roadef, benchmark	0							1	10
Mayer-EichbergerW13 Mayer-EichbergerW13 [10]	SAT Encodings for the Car Sequencing Problem		CSPlib, benchmark, github	0							2	15
ThiruvadyME11 ThiruvadyME11 [22]	Car sequencing with constraint-based ACO			0							3	No
HoevePRS06 HoevePRS06 [23]	Revisiting the Sequence Constraint		real-life	0							4	14
ButaruH05 ButaruH05 [3]	The car-sequencing problem as n-ary CSP–Sequential and parallel solving		CSPlib	0							5	11
PerronS04 PerronS04 [15]	Combining Forces to Solve the Car Sequencing Problem		generated instance	0							6	16
GottliebPS03 GottliebPS03 [7]	A Study of Greedy, Local Search, and Ant Colony Optimization Approaches for Car Sequencing Problems		real-world, benchmark, CSPlib	0							7	13
ReginP97 ReginP97 [16]	A Filtering Algorithm for Global Sequencing Constraints		random instance, benchmark, real-life	0							8	17
DincbasSH88 DincbasSH88 [4]	Solving the Car-Sequencing Problem in Constraint Logic Programming		real-life	0							9	12

3 Journal Articles

3.1 Articles from bibtex

Table 5: Works from bibtex (Total 19)

Key Source	Authors	Title	LC	Cite	Year	Conference /Journal /School	Pages	Nr Cites	Nr Refs	b	c
YuLZCLW22 YuLZCLW22	Y. Yu, X. Lu, T. Zhao, M. Cheng, L. Liu, W. Wei	Heuristic approaches for the car sequencing problems with block batches	Yes	[28]	2022	EURASIP Journal on Wireless Communications and Networking	17	2	37	56	58
WinterM21 WinterM21	F. Winter, N. Musliu	Constraint-based Scheduling for Paint Shops in the Automotive Supply Industry	No	[26]	2021	ACM Transactions on Intelligent Systems and Technology (TIST)	25	0	0	No	59
MoyaCB19 MoyaCB19	I. Moya, M. Chica, J. Bautista	Constructive metaheuristics for solving the Car Sequencing Problem under uncertain partial demand	Yes	[12]	2019	Computers Industrial Engineering	13	8	44	50	60
YavuzE18 YavuzE18	M. Yavuz, H. Ergin	Advanced constraint propagation for the combined car sequencing and level scheduling problem	No	[27]	2018	Computers Operations Research	12	0	0	No	61
ZhangGWH17 ZhangGWH17	X. ZHANG, L. GAO, L. WEN, Z. HUANG	Parallel Construction Heuristic Combined with Constraint Propagation for the Car Sequencing Problem	Yes	[29]	2017	Chinese Journal of Mechanical Engineering	12	3	32	57	62
MazurN15 MazurN15	M. Mazur, A. Niederliński	A Two-stage approach for an optimum solution of the car assembly scheduling problem. Part 2. CLP solution and real-world example	No	[11]	2015	Archives of Control Sciences	9	0	0	No	63
SialaHH155 SialaHH155	M. Siala, E. Hebrard, M. Huguet	A study of constraint programming heuristics for the car-sequencing problem	Yes	[20]	2015	Eng. Appl. Artif. Intell.	11	15	10	54	64
GolleRB14 GolleRB14	U. Golle, F. Rothlauf, N. Boysen	Iterative beam search for car sequencing	Yes	[6]	2014	Annals of Operations Research	16	15	15	47	65
SialaHH14 SialaHH14	M. Siala, E. Hebrard, M. Huguet	An optimal arc consistency algorithm for a particular case of sequence constraint	Yes	[19]	2014	Constraints An Int. J.	27	3	14	53	66
OzturkTHO13 OzturkTHO13	C. Öztürk, S. Tunali, B. Hnich, M. Arslan Ornek	Balancing and scheduling of flexible mixed model assembly lines	Yes	[13]	2013	Constraints An Int. J.	36	31	44	51	67
BoysenFS09 BoysenFS09	N. Boysen, M. Fliedner, A. Scholl	Sequencing mixed-model assembly lines: Survey, classification and model critique	Yes	[2]	2009	European Journal of Operational Research	25	308	167	46	68
HoevePRS09 HoevePRS09	Willem-Jan van Hoeve, G. Pesant, L. Rousseau, A. Sabharwal	New filtering algorithms for combinations of among constraints	Yes	[24]	2009	Constraints An Int. J.	20	13	8	48	69
Schaus09 Schaus09	P. Schaus	Solving balancing and bin-packing problems with constraint programming	No	[17]	2009	These de doctorat, Université catholique de Louvain	null	0	0	No	70
SolnonCNA08 SolnonCNA08	C. Solnon, V. Cung, A. Nguyen, C. Artigues	The car sequencing problem: Overview of state-of-the-art methods and industrial case-study of the ROADEF'2005 challenge problem	Yes	[21]	2008	European Journal of Operational Research	16	146	22	55	71
Kis04 Kis04	T. Kis	On the complexity of the car sequencing problem	Yes	[9]	2004	Operations Research Letters	5	69	3	49	72
Gent98 Gent98	Ian P Gent	Two results on car-sequencing problems	No	[5]	1998	Report University of Strathclyde, APES-02-98	null	0	0	No	73
WarwickT95 WarwickT95	T. Warwick, Edward P. K. Tsang	Tackling Car Sequencing Problems Using a Generic Genetic Algorithm	No	[25]	1995	Evolutionary Computation	null	28	0	No	74
HindiP94 HindiP94	Khalil S. Hindi, G. Ploszajski	Formulation and solution of a selection and sequencing problem in car manufacture	No	[8]	1994	Computers Industrial Engineering	null	24	4	No	75
ParrelloK86 ParrelloK86	Bruce D. Parrello, Waldo C. Kabat	Job-Shop Scheduling Using Automated Reasoning: A Case Study of the Car-Sequencing Problem	Yes	[14]	1986	J. Autom. Reason.	42	74	0	52	76

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
BoysenFS09 [2]	25	distributed, due-date, inventory, job, job-shop, machine, multi-agent, order, precedence, preempt, resource, scheduling, setup-time, task, transportation		cumulative, cycle		OZ	automotive	automobile industry, automotive industry	Roadef, real-life, real-world		37	68
GolleRB14 [6]	16	job, job-shop, order, resource, scheduling		cycle	Java				CSPlib, Roadef, real-life, real-world		34	65
HoevePRS09 [24]	20	machine, order, scheduling		Among constraint, Cardinality constraint, GCC constraint, Regular constraint, cumulative		CHIP, Ilog Solver	nurse		CSPlib, benchmark, real-life	time-tabling	38	69
Kis04 [9]	5	job, job-shop, order, scheduling							benchmark		41	72
MoyaCB19 [12]	13	distributed, flow-shop, job, job-shop, make-span, order, scheduling, task		cycle	Java	OZ	crew-scheduling, railway, robot		CSPlib, Roadef, benchmark, bitbucket, generated instance, real-life	GRASP	29	60
OzturkTHO13 [13]	36	activity, cmax, completion-time, flow-shop, job, machine, make-span, order, precedence, preempt, resource, scheduling, setup-time, task	SBSFMMAL	Channeling constraint, Disjunctive constraint, cumulative, cycle, disjunctive		CHIP, Cplex, Ilog Solver, OPL, OZ			real-life, real-world	edge-finding	36	67
ParrelloK86 [14]	42	job-shop, machine, scheduling, job, order			Prolog	OPL	nurse		real-life		45	76
SialaHH14 [19]	27	resource, scheduling, order		AtMostSeqCard, Atmost constraint, Cardinality constraint, AmongSeq constraint, CardPath, Regular constraint, MultiAtMostSeqCard, AtMostSeq, Among constraint		CHIP			Roadef, CSPlib, benchmark		35	66
SialaHH155 [20]	11	machine, order, resource, task		Among constraint, AtMostSeq, AtMostSeqCard		CHIP	automotive	automotive industry	CSPlib, Roadef, benchmark		33	64

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

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
SolnonCNA08 [21]	16	distributed, due-date, inventory, job, job-shop, order, scheduling, task			C++	CHIP, Ilog Solver, OZ			CSPlib, Roadef, benchmark, generated instance, industrial instance, industrial partner, real-life		40	71
YuLZCLW22 [28]	17	BOM, bill of material, inventory, job, job-shop, machine, order, resource, scheduling, setup-time	parallel machine		C++, Java	Cplex, Gurobi	automotive, car manufacturing	automobile industry	CSPlib, Roadef, benchmark, real-life, real-world	GRASP	27	58
ZhangGWH17 [29]	12	job, job-shop, machine, order, scheduling, transportation				Cplex			CSPlib, Roadef, benchmark, real-life	GRASP	31	62

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	Related To	Classification	Constraints	a	b
YuLZCLW22 YuLZCLW22 [28]	Heuristic approaches for the car sequencing problems with block batches		CSPlib, Roadef, benchmark, real-life, real-world	0							27	56
WinterM21 WinterM21 [26]	Constraint-based Scheduling for Paint Shops in the Automotive Supply Industry			0							28	No
MoyaCB19 MoyaCB19 [12]	Constructive metaheuristics for solving the Car Sequencing Problem under uncertain partial demand		CSPlib, Roadef, benchmark, bitbucket, generated instance, real-life	1							29	50
YavuzE18 YavuzE18 [27]	Advanced constraint propagation for the combined car sequencing and level scheduling problem			0							30	No
ZhangGWH17 ZhangGWH17 [29]	Parallel Construction Heuristic Combined with Constraint Propagation for the Car Sequencing Problem		CSPlib, Roadef, benchmark, real-life	1							31	57
MazurN15 MazurN15 [11]	A Two-stage approach for an optimum solution of the car assembly scheduling problem. Part 2. CLP solution and real-world example			0							32	No
SialaHH155 SialaHH155 [20]	A study of constraint programming heuristics for the car-sequencing problem		CSPlib, Roadef, benchmark	2							33	54
GolleRB14 GolleRB14 [6]	Iterative beam search for car sequencing		CSPlib, Roadef, real-life, real-world	0							34	47
SialaHH14 SialaHH14 [19]	An optimal arc consistency algorithm for a particular case of sequence constraint		Roadef, CSPlib, benchmark	0							35	53
OzturkTHO13 OzturkTHO13 [13]	Balancing and scheduling of flexible mixed model assembly lines		real-life, real-world	2							36	51
BoysenFS09 BoysenFS09 [2]	Sequencing mixed-model assembly lines: Survey, classification and model critique		Roadef, real-life, real-world	0							37	46
HoevePRS09 HoevePRS09 [24]	New filtering algorithms for combinations of among constraints		CSPlib, benchmark, real-life	1							38	48
Schaus09 Schaus09 [17]	Solving balancing and bin-packing problems with constraint programming			0							39	No
SolnonCNA08 SolnonCNA08 [21]	The car sequencing problem: Overview of state-of-the-art methods and industrial case-study of the ROADEF'2005 challenge problem		CSPlib, Roadef, benchmark, generated instance, industrial instance, industrial partner, real-life	4							40	55
Kis04 Kis04 [9]	On the complexity of the car sequencing problem		benchmark	0							41	49
Gent98 Gent98 [5]	Two results on car-sequencing problems			0							42	No
WarwickT95 WarwickT95 [25]	Tackling Car Sequencing Problems Using a Generic Genetic Algorithm			0							43	No
HindiP94 HindiP94 [8]	Formulation and solution of a selection and sequencing problem in car manufacture			0							44	No
ParrelloK86 ParrelloK86 [14]	Job-Shop Scheduling Using Automated Reasoning: A Case Study of the Car-Sequencing Problem		real-life	0							45	52

4 Authors

Table 8: Co-Authors of Articles/Papers

Author	Nr Works	Nr Cites	Entries
Mohamed Siala	4	20	Siala15 [18], SialaHH155 [20], SialaHH14 [19], ArtiguesHM0W14 [1]
Emmanuel Hebrard	3	20	SialaHH155 [20], SialaHH14 [19], ArtiguesHM0W14 [1]
Christian Artigues	2	148	ArtiguesHM0W14 [1], SolnonCNA08 [21]
Nils Boysen	2	323	GolleRB14 [6], BoysenFS09 [2]
Marie-José Huguet	2	18	SialaHH155 [20], SialaHH14 [19]
Valentin Mayer-Eichberger	2	2	ArtiguesHM0W14 [1], Mayer-EichbergerW13 [10]
Gilles Pesant	2	46	HoevePRS09 [24], HoevePRS06 [23]
Ashish Sabharwal	2	46	HoevePRS09 [24], HoevePRS06 [23]
Christine Solnon	2	192	SolnonCNA08 [21], GottliebPS03 [7]
Toby Walsh	2	2	ArtiguesHM0W14 [1], Mayer-EichbergerW13 [10]
M. Arslan Ornek	1	31	OzturkTHO13 [13]
Joaquín Bautista	1	8	MoyaCB19 [12]
Mihaela Butaru	1	0	ButaruH05 [3]
Waldo C. Kabat	1	74	ParrelloK86 [14]
Minjiao Cheng	1	2	YuLZCLW22 [28]
Manuel Chica	1	8	MoyaCB19 [12]
Van-Dat Cung	1	146	SolnonCNA08 [21]
Bruce D. Parrello	1	74	ParrelloK86 [14]
Mehmet Dincbas	1	0	DincbasSH88 [4]
Hüseyin Ergin	1	0	YavuzE18 [27]
Andreas Ernst	1	0	ThiruvadyME11 [22]
Malte Fliedner	1	308	BoysenFS09 [2]
Liang GAO	1	3	ZhangGWH17 [29]
Uli Golle	1	15	GolleRB14 [6]
Jens Gottlieb	1	46	GottliebPS03 [7]
Zhaodong HUANG	1	3	ZhangGWH17 [29]
Zineb Habbas	1	0	ButaruH05 [3]
Brahim Hnich	1	31	OzturkTHO13 [13]
Willem Jan van Hoeve	1	33	HoevePRS06 [23]
Tamás Kis	1	69	Kis04 [9]
Lin Liu	1	2	YuLZCLW22 [28]
Xiaochun Lu	1	2	YuLZCLW22 [28]
Michał Mazur	1	0	MazurN15 [11]
Bernd Meyer	1	0	ThiruvadyME11 [22]
Ignacio Moya	1	8	MoyaCB19 [12]
Nysret Musliu	1	0	WinterM21 [26]
Alain Nguyen	1	146	SolnonCNA08 [21]
Antoni Niederliński	1	0	MazurN15 [11]
Ian P Gent	1	0	Gent98 [5]
Edward P. K. Tsang	1	28	WarwickT95 [25]
Laurent Perron	1	17	PerronS04 [15]
Grzegorz Ploszajski	1	24	HindiP94 [8]
Markus Puchta	1	46	GottliebPS03 [7]
Jean-Francois Puget	1	53	ReginP97 [16]
Dhananjay Raghavan Thiruvady	1	0	ThiruvadyME11 [22]
Franz Rothlauf	1	15	GolleRB14 [6]
Louis-Martin Rousseau	1	13	HoevePRS09 [24]
Louis-Martin Rousseau	1	33	HoevePRS06 [23]
Jean-Charles Régin	1	53	ReginP97 [16]
Khalil S. Hindi	1	24	HindiP94 [8]
Pierre Schaus	1	0	Schaus09 [17]

Table 8: Co-Authors of Articles/Papers

Author	Nr Works	Nr Cites	Entries
Armin Scholl	1	308	BoysenFS09 [2]
Paul Shaw	1	17	PerronS04 [15]
Helmut Simonis	1	0	DincbasSH88 [4]
Semra Tunali	1	31	OzturkTHO13 [13]
Pascal Van Hentenryck	1	0	DincbasSH88 [4]
Long WEN	1	3	ZhangGWH17 [29]
Terry Warwick	1	28	WarwickT95 [25]
Wenchao Wei	1	2	YuLZCLW22 [28]
Felix Winter	1	0	WinterM21 [26]
Mesut Yavuz	1	0	YavuzE18 [27]
Yingjie Yu	1	2	YuLZCLW22 [28]
Xiangyang ZHANG	1	3	ZhangGWH17 [29]
Tao Zhao	1	2	YuLZCLW22 [28]
Willem-Jan van Hoeve	1	13	HoevePRS09 [24]
Cemalettin Öztürk	1	31	OzturkTHO13 [13]

5 Most Cited Works

Table 9: Works from bibtex (Total 29)

Key Source	Authors	Title	LC	Cite	Year	Conference /Journal /School	Pages	Nr Cites	Nr Refs	b	c
BoysenFS09 BoysenFS09	N. Boysen, M. Fliedner, A. Scholl	Sequencing mixed-model assembly lines: Survey, classification and model critique	Yes	[2]	2009	European Journal of Operational Research	25	308	167	46	68
SolnonCNA08 SolnonCNA08	C. Solnon, V. Cung, A. Nguyen, C. Artigues	The car sequencing problem: Overview of state-of-the-art methods and industrial case-study of the ROADEF'2005 challenge problem	Yes	[21]	2008	European Journal of Operational Research	16	146	22	55	71
ParrelloK86 ParrelloK86	Bruce D. Parrello, Waldo C. Kabat	Job-Shop Scheduling Using Automated Reasoning: A Case Study of the Car-Sequencing Problem	Yes	[14]	1986	J. Autom. Reason.	42	74	0	52	76
Kis04 Kis04	T. Kis	On the complexity of the car sequencing problem	Yes	[9]	2004	Operations Research Letters	5	69	3	49	72
ReginP97 ReginP97	J. Régin, J. Puget	A Filtering Algorithm for Global Sequencing Constraints	Yes	[16]	1997	CP 1997	15	53	3	17	25
GottliebPS03 GottliebPS03	J. Gottlieb, M. Puchta, C. Solnon	A Study of Greedy, Local Search, and Ant Colony Optimization Approaches for Car Sequencing Problems	Yes	[7]	2003	EvoWorkshop 2003	12	46	5	13	24
HoevePRS06 HoevePRS06	Willem Jan van Hoeve, G. Pesant, L. Rousseau, A. Sabharwal	Revisiting the Sequence Constraint	Yes	[23]	2006	CP 2006	15	33	7	14	21
OzturkTHO13 OzturkTHO13	C. Öztürk, S. Tunali, B. Hnich, M. Arslan Ornek	Balancing and scheduling of flexible mixed model assembly lines	Yes	[13]	2013	Constraints An Int. J.	36	31	44	51	67
WarwickT95 WarwickT95	T. Warwick, Edward P. K. Tsang	Tackling Car Sequencing Problems Using a Generic Genetic Algorithm	No	[25]	1995	Evolutionary Computation	null	28	0	No	74
HindiP94 HindiP94	Khalil S. Hindi, G. Ploszajski	Formulation and solution of a selection and sequencing problem in car manufacture	No	[8]	1994	Computers Industrial Engineering	null	24	4	No	75
PerronS04 PerronS04	L. Perron, P. Shaw	Combining Forces to Solve the Car Sequencing Problem	Yes	[15]	2004	CPAIOR 2004	15	17	9	16	23
SialaHH155 SialaHH155	M. Siala, E. Hebrard, M. Huguet	A study of constraint programming heuristics for the car-sequencing problem	Yes	[20]	2015	Eng. Appl. Artif. Intell.	11	15	10	54	64
GolleRB14 GolleRB14	U. Golle, F. Rothlauf, N. Boysen	Iterative beam search for car sequencing	Yes	[6]	2014	Annals of Operations Research	16	15	15	47	65
HoevePRS09 HoevePRS09	Willem-Jan van Hoeve, G. Pesant, L. Rousseau, A. Sabharwal	New filtering algorithms for combinations of among constraints	Yes	[24]	2009	Constraints An Int. J.	20	13	8	48	69
MoyaCB19 MoyaCB19	I. Moya, M. Chica, J. Bautista	Constructive metaheuristics for solving the Car Sequencing Problem under uncertain partial demand	Yes	[12]	2019	Computers Industrial Engineering	13	8	44	50	60
SialaHH14 SialaHH14	M. Siala, E. Hebrard, M. Huguet	An optimal arc consistency algorithm for a particular case of sequence constraint	Yes	[19]	2014	Constraints An Int. J.	27	3	14	53	66
ZhangGWH17 ZhangGWH17	X. ZHANG, L. GAO, L. WEN, Z. HUANG	Parallel Construction Heuristic Combined with Constraint Propagation for the Car Sequencing Problem	Yes	[29]	2017	Chinese Journal of Mechanical Engineering	12	3	32	57	62
ArtiguesHM0W14 ArtiguesHM0W14	C. Artigues, E. Hebrard, V. Mayer-Eichberger, M. Siala, T. Walsh	SAT and Hybrid Models of the Car Sequencing Problem	Yes	[1]	2014	CPAIOR 2014	16	2	16	10	18
YuLZCLW22 YuLZCLW22	Y. Yu, X. Lu, T. Zhao, M. Cheng, L. Liu, W. Wei	Heuristic approaches for the car sequencing problems with block batches	Yes	[28]	2022	EURASIP Journal on Wireless Communications and Networking	17	2	37	56	58
DincbasSH88 DincbasSH88	M. Dincbas, H. Simonis, Pascal Van Hentenryck	Solving the Car-Sequencing Problem in Constraint Logic Programming	Yes	[4]	1988	ECAI 1988	6	0	0	12	26
Siala15 Siala15	M. Siala	Search, propagation, and learning in sequencing and scheduling problems. (Recherche, propagation et apprentissage dans les problèmes de séquencement et d'ordonnancement)	Yes	[18]	2015	INSA Toulouse, France	200	0	0	144	n/a

Table 9: Works from bibtex (Total 29)

Key Source	Authors	Title	LC	Cite	Year	Conference /Journal /School	Pages	Nr Cites	Nr Refs	b	c
Gent98 Gent98	Ian P Gent	Two results on car-sequencing problems	No	[5]	1998	Report University of Strathclyde, APES-02-98	null	0	0	No	73
Schaus09 Schaus09	P. Schaus	Solving balancing and bin-packing problems with constraint programming	No	[17]	2009	These de doctorat, Université catholique de Louvain	null	0	0	No	70
YavuzE18 YavuzE18	M. Yavuz, H. Ergin	Advanced constraint propagation for the combined car sequencing and level scheduling problem	No	[27]	2018	Computers Operations Research	12	0	0	No	61
WinterM21 WinterM21	F. Winter, N. Musliu	Constraint-based Scheduling for Paint Shops in the Automotive Supply Industry	No	[26]	2021	ACM Transactions on Intelligent Systems and Technology (TIST)	25	0	0	No	59
ThiruvadyME11 ThiruvadyME11	Dhananjay Raghavan Thiruvady, B. Meyer, A. Ernst	Car sequencing with constraint-based ACO	No	[22]	2011	GECCO 2011	8	0	0	No	20
ButaruH05 ButaruH05	M. Butaru, Z. Habbas	The car-sequencing problem as n-ary CSP–Sequential and parallel solving	Yes	[3]	2005	Australian Joint Conference on Artificial Intelligence 2005	4	0	0	11	22
MazurN15 MazurN15	M. Mazur, A. Niederliński	A Two-stage approach for an optimum solution of the car assembly scheduling problem. Part 2. CLP solution and real-world example	No	[11]	2015	Archives of Control Sciences	9	0	0	No	63
Mayer-EichbergerW13 Mayer-EichbergerW13	V. Mayer-Eichberger, T. Walsh	SAT Encodings for the Car Sequencing Problem	Yes	[10]	2013	SAT 2013	13	0	0	15	19

6 Problem Classification

7 Concept Matching

In order to automatically find out properties of the articles, we try to find certain concepts in the pdf versions of the articles. We manually defined an ontology of important concepts to look for, and defined regular expressions that would recognize these concepts in the text. 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. We group the results by number of occurrences of the concept in the text of the work. Note that this is only approximate, as we do include the full pdf file in the search. A concept might only be mentioned in some of the title of citations used in the paper, we do count them in our results, as we were not able to remove the bibliography from the main body of the work.

Overall, if a work is not mentioned as using the concept, the the text does not contain a match to the corresponding regular expression. A fundamental limitation of this approach is that it only really works for text written in the language the regular expressions are designed for (in our case English), and not those written in another language. We could overcome this limitation by defining all concepts in other languages as well, and then using a language flag to identify the language the text is written in.

Note that we only show the first 30 matching entries in each concept category, and list the total number of matches if there are more than 30 matches.

7.1 Concept Type Concepts

Table 10: Works for Concepts of Type Concepts

Type	Keyword	High	Medium	Low
Concepts	BOM			YuLZCLW22 [28]
Concepts	activity	Siala15 [18], OzturkTHO13 [13]		ArtiguesHM0W14 [1]
Concepts	bill of material			YuLZCLW22 [28]
Concepts	cmax	Siala15 [18], OzturkTHO13 [13]		
Concepts	completion-time	OzturkTHO13 [13]		
Concepts	distributed			MoyaCB19 [12], BoysenFS09 [2], SolnonCNA08 [21], DincbasSH88 [4]
Concepts	due-date		BoysenFS09 [2]	Siala15 [18], SolnonCNA08 [21]
Concepts	earliness			Siala15 [18]
Concepts	flow-shop			MoyaCB19 [12], OzturkTHO13 [13]
Concepts	inventory	YuLZCLW22 [28]		BoysenFS09 [2], SolnonCNA08 [21]
Concepts	job	Siala15 [18], OzturkTHO13 [13], BoysenFS09 [2], ParrelloK86 [14]	PerronS04 [15], Kis04 [9]	YuLZCLW22 [28], MoyaCB19 [12], ZhangGWH17 [29], GolleRB14 [6], SolnonCNA08 [21], ButaruH05 [3], DincbasSH88 [4]
Concepts	job-shop	Siala15 [18], ParrelloK86 [14]	PerronS04 [15]	YuLZCLW22 [28], MoyaCB19 [12], ZhangGWH17 [29], GolleRB14 [6], BoysenFS09 [2], SolnonCNA08 [21], ButaruH05 [3], Kis04 [9], DincbasSH88 [4]
Concepts	lazy clause generation	Siala15 [18]		ArtiguesHM0W14 [1]
Concepts	machine	Siala15 [18], OzturkTHO13 [13], BoysenFS09 [2]	YuLZCLW22 [28]	ZhangGWH17 [29], SialaHH155 [20], HoevePRS09 [24], ButaruH05 [3], GottliebPS03 [7], ReginP97 [16], DincbasSH88 [4], ParrelloK86 [14]
Concepts	make-span	Siala15 [18], OzturkTHO13 [13]		MoyaCB19 [12]
Concepts	multi-agent			BoysenFS09 [2]
Concepts	open-shop	Siala15 [18]		
Concepts	order	MoyaCB19 [12], ZhangGWH17 [29], Siala15 [18], SialaHH155 [20], SialaHH14 [19], GolleRB14 [6], OzturkTHO13 [13], BoysenFS09 [2], HoevePRS09 [24], SolnonCNA08 [21], HoevePRS06 [23], ButaruH05 [3], PerronS04 [15], GottliebPS03 [7], ReginP97 [16], DincbasSH88 [4], ParrelloK86 [14]	ArtiguesHM0W14 [1]	YuLZCLW22 [28], Kis04 [9]
Concepts	precedence	Siala15 [18], OzturkTHO13 [13], DincbasSH88 [4]		BoysenFS09 [2]
Concepts	preempt		OzturkTHO13 [13]	BoysenFS09 [2]
Concepts	resource	Siala15 [18], OzturkTHO13 [13]	BoysenFS09 [2], DincbasSH88 [4]	YuLZCLW22 [28], SialaHH155 [20], SialaHH14 [19], GolleRB14 [6], PerronS04 [15], ReginP97 [16]
Concepts	scheduling	YuLZCLW22 [28], MoyaCB19 [12], ZhangGWH17 [29], Siala15 [18], OzturkTHO13 [13], BoysenFS09 [2], SolnonCNA08 [21], DincbasSH88 [4], ParrelloK86 [14]	PerronS04 [15], Kis04 [9], ReginP97 [16]	SialaHH14 [19], GolleRB14 [6], Mayer-EichbergerW13 [10], HoevePRS09 [24], GottliebPS03 [7]
Concepts	sequence dependent setup			Siala15 [18]
Concepts	setup-time		YuLZCLW22 [28], OzturkTHO13 [13], BoysenFS09 [2]	Siala15 [18]
Concepts	tardiness			Siala15 [18]
Concepts	task	Siala15 [18], OzturkTHO13 [13], BoysenFS09 [2], DincbasSH88 [4]	SolnonCNA08 [21]	MoyaCB19 [12], SialaHH155 [20], Mayer-EichbergerW13 [10], ButaruH05 [3]
Concepts	transportation		ZhangGWH17 [29], BoysenFS09 [2]	HoevePRS06 [23]

7.2 Concept Type Classification

Table 11: Works for Concepts of Type Classification

Type	Keyword	High	Medium	Low
Classification	OSP	Siala15 [18]		
Classification	RCPSP			Siala15 [18]
Classification	SBSFMMAL	OzturkTHO13 [13]		
Classification	TMS			Siala15 [18]
Classification	parallel machine			YuLZCLW22 [28]
Classification	single machine			Siala15 [18]

7.3 Concept Type Constraints

Table 12: Works for Concepts of Type Constraints

Type	Keyword	High	Medium	Low
Constraints	Among constraint	Siala15 [18], SialaHH14 [19], HoevePRS09 [24], HoevePRS06 [23]		SialaHH155 [20], ArtiguesHM0W14 [1]
Constraints	AmongSeq constraint		Siala15 [18], SialaHH14 [19]	
Constraints	AtMostSeq	Siala15 [18], SialaHH155 [20], SialaHH14 [19]		
Constraints	AtMostSeqCard	Siala15 [18], SialaHH155 [20], SialaHH14 [19]		
Constraints	Atmost constraint	Siala15 [18], SialaHH14 [19]		Mayer-EichbergerW13 [10]
Constraints	Balance constraint			Siala15 [18]
Constraints	CardPath			Siala15 [18], SialaHH14 [19]
Constraints	Cardinality constraint	Siala15 [18], SialaHH14 [19], ArtiguesHM0W14 [1], Mayer-EichbergerW13 [10], ReginP97 [16]	HoevePRS09 [24], HoevePRS06 [23]	
Constraints	Channeling constraint	OzturkTHO13 [13]		
Constraints	Disjunctive constraint	DincbasSH88 [4]	Siala15 [18], OzturkTHO13 [13]	
Constraints	GCC constraint			Siala15 [18], HoevePRS09 [24]
Constraints	MultiAtMostSeqCard	Siala15 [18]	SialaHH14 [19]	
Constraints	Regular constraint	Siala15 [18], SialaHH14 [19], HoevePRS09 [24]	HoevePRS06 [23]	
Constraints	Reified constraint			Siala15 [18]
Constraints	alldifferent	Siala15 [18]		
Constraints	circuit		Siala15 [18], DincbasSH88 [4]	
Constraints	cumulative	BoysenFS09 [2]	ArtiguesHM0W14 [1], Mayer-EichbergerW13 [10], HoevePRS09 [24]	Siala15 [18], OzturkTHO13 [13], ReginP97 [16]
Constraints	cycle	MoyaCB19 [12], BoysenFS09 [2], GottliebPS03 [7]	Siala15 [18], GolleRB14 [6]	OzturkTHO13 [13]
Constraints	disjunctive	Siala15 [18], OzturkTHO13 [13], DincbasSH88 [4]		
Constraints	table constraint			Siala15 [18]

7.4 Concept Type ProgLanguages

Table 13: Works for Concepts of Type ProgLanguages

Type	Keyword	High	Medium	Low
ProgLanguages	C++			YuLZCLW22 [28], SolnonCNA08 [21], ButaruH05 [3]
ProgLanguages	Java			YuLZCLW22 [28], MoyaCB19 [12], GolleRB14 [6]
ProgLanguages	Prolog	DincbasSH88 [4], ParrelloK86 [14]		

7.5 Concept Type CPSystems

Table 14: Works for Concepts of Type CPSystems

Type	Keyword	High	Medium	Low
CPSystems	CHIP	DincbasSH88 [4]		Siala15 [18], SialaHH155 [20], SialaHH14 [19], OzturkTHO13 [13], HoevePRS09 [24], SolnonCNA08 [21], HoevePRS06 [23], ReginP97 [16]
CPSystems	Claire	Siala15 [18]		
CPSystems	Cplex	YuLZCLW22 [28]	ZhangGWH17 [29]	OzturkTHO13 [13]
CPSystems	Gurobi			YuLZCLW22 [28]
CPSystems	Ilog Scheduler			PerronS04 [15], ReginP97 [16]
CPSystems	Ilog Solver		HoevePRS09 [24], ReginP97 [16]	Siala15 [18], OzturkTHO13 [13], SolnonCNA08 [21], HoevePRS06 [23], ButaruH05 [3]
CPSystems	Mistral	Siala15 [18]	ArtiguesHM0W14 [1]	
CPSystems	OPL		OzturkTHO13 [13]	Siala15 [18], DincbasSH88 [4], ParrelloK86 [14]
CPSystems	OZ		MoyaCB19 [12], BoysenFS09 [2]	OzturkTHO13 [13], SolnonCNA08 [21], PerronS04 [15]

7.6 Concept Type ApplicationAreas

Table 15: Works for Concepts of Type ApplicationAreas

Type	Keyword	High	Medium	Low
ApplicationAreas	automotive	YuLZCLW22 [28]	BoysenFS09 [2]	Siala15 [18], SialaHH155 [20], ReginP97 [16]
ApplicationAreas	car manufacturing			YuLZCLW22 [28]
ApplicationAreas	crew-scheduling			MoyaCB19 [12], ReginP97 [16]
ApplicationAreas	nurse			HoevePRS09 [24], HoevePRS06 [23], ParrelloK86 [14]
ApplicationAreas	railway			MoyaCB19 [12]
ApplicationAreas	rectangle-packing			Siala15 [18]
ApplicationAreas	robot			MoyaCB19 [12]

7.7 Concept Type Industries

Table 16: Works for Concepts of Type Industries

Type	Keyword	High	Medium	Low
Industries	automobile industry	BoysenFS09 [2]		YuLZCLW22 [28]
Industries	automotive industry		BoysenFS09 [2]	SialaHH155 [20]

7.8 Concept Type Benchmarks

Table 17: Works for Concepts of Type Benchmarks

Type	Keyword	High	Medium	Low
Benchmarks	CSPlib	MoyaCB19 [12], ZhangGWH17 [29], Siala15 [18], ArtiguesHM0W14 [1], Mayer-EichbergerW13 [10], SolnonCNA08 [21]	YuLZCLW22 [28], SialaHH155 [20], SialaHH14 [19], GolleRB14 [6], HoevePRS09 [24], GottliebPS03 [7]	ButaruH05 [3]
Benchmarks	Roadef	Siala15 [18], SolnonCNA08 [21]	MoyaCB19 [12], SialaHH155 [20], BoysenFS09 [2]	YuLZCLW22 [28], ZhangGWH17 [29], SialaHH14 [19], ArtiguesHM0W14 [1], GolleRB14 [6]
Benchmarks	benchmark	MoyaCB19 [12], ZhangGWH17 [29], Siala15 [18], SialaHH155 [20], SialaHH14 [19], Mayer-EichbergerW13 [10], GottliebPS03 [7]	YuLZCLW22 [28], HoevePRS09 [24], SolnonCNA08 [21]	ArtiguesHM0W14 [1], Kis04 [9], ReginP97 [16]
Benchmarks	bitbucket			MoyaCB19 [12]
Benchmarks	generated instance			MoyaCB19 [12], SolnonCNA08 [21], PerronS04 [15]
Benchmarks	github		Siala15 [18]	ArtiguesHM0W14 [1], Mayer-EichbergerW13 [10]
Benchmarks	industrial instance			SolnonCNA08 [21]
Benchmarks	industrial partner			SolnonCNA08 [21]
Benchmarks	random instance			Siala15 [18], ReginP97 [16]
Benchmarks	real-life		SolnonCNA08 [21], DincbasSH88 [4]	YuLZCLW22 [28], MoyaCB19 [12], ZhangGWH17 [29], GolleRB14 [6], OzturkTHO13 [13], BoysenFS09 [2], HoevePRS09 [24], HoevePRS06 [23], ReginP97 [16], ParrelloK86 [14]
Benchmarks	real-world	BoysenFS09 [2]	YuLZCLW22 [28], OzturkTHO13 [13]	Siala15 [18], GolleRB14 [6], GottliebPS03 [7]

7.9 Concept Type Algorithms

Table 18: Works for Concepts of Type Algorithms

Type	Keyword	High	Medium	Low
Algorithms	GRASP	MoyaCB19 [12]		YuLZCLW22 [28], ZhangGWH17 [29], Siala15 [18]
Algorithms	edge-finder			ReginP97 [16]
Algorithms	edge-finding		Siala15 [18]	OzturkTHO13 [13]
Algorithms	time-tabling		Siala15 [18]	HoevePRS09 [24], ReginP97 [16]

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A Papers and Articles Missing a Local Copy

This section lists all papers and articles for which we were not able to locate an electronic copy that we could download to our system. This might be because the work is behind a paywall for which we do not have access, or since the paper only exists in hardcopy, for works from the start of the period covered. As in either case we are not able to extract useful information from the work, either automatically, or manually, without the actual text itself, these gaps should be closed where possible.

Table 19: PAPER without Local Copy

Key	URL	Authors	Title	Year	Conference /Journal	Cite
ThiruvadyME11	ThiruvadyME11	Dhananjay Raghavan Thiruvady, B. Meyer, A. Ernst	Car sequencing with constraint-based ACO	2011	GECCO 2011	[22]

Table 20: ARTICLE without Local Copy

Key	URL	Authors	Title	Year	Conference /Journal	Cite
WinterM21	WinterM21	F. Winter, N. Musliu	Constraint-based Scheduling for Paint Shops in the Automotive Supply Industry	2021	ACM Transactions on Intelligent Systems and Technology (TIST)	[26]
YavuzE18	YavuzE18	M. Yavuz, H. Ergin	Advanced constraint propagation for the combined car sequencing and level scheduling problem	2018	Computers Operations Research	[27]
MazurN15	MazurN15	M. Mazur, A. Niederliński	A Two-stage approach for an optimum solution of the car assembly scheduling problem. Part 2. CLP solution and real-world example	2015	Archives of Control Sciences	[11]
Schaus09	Schaus09	P. Schaus	Solving balancing and bin-packing problems with constraint programming	2009	These de doctorat, Université catholique de Louvain	[17]
Gent98	Gent98	Ian P Gent	Two results on car-sequencing problems	1998	Report University of Strathclyde, APES-02-98	[5]
WarwickT95	WarwickT95	T. Warwick, Edward P. K. Tsang	Tackling Car Sequencing Problems Using a Generic Genetic Algorithm	1995	Evolutionary Computation	[25]
HindiP94	HindiP94	Khalil S. Hindi, G. Ploszajski	Formulation and solution of a selection and sequencing problem in car manufacture	1994	Computers Industrial Engineering	[8]

B Papers and Articles Without Recognized Concepts

This section lists papers and articles for which we have a pdf local copy, but where we were not able to extract any of the defined concepts. This can basically have two reasons. We either have included a paper which is not at all related to scheduling, so that none of the defined concepts occur in the paper. A more likely cause is that the pdf file is a scanned document for which optical character recognition was not run or not successful, so that the pdf consists of a series of bitmap images. In that case, pdfgrep is unable to find any text in the document, and no matches for concepts are found. It may be useful to check the pdf files to see if that is the case.

Table 21: PAPER without Concepts

Key	Local Copy	Authors	Title	Year	Conference /Journal	Cite	Pages

Table 22: ARTICLE without Concepts

Key	Local Copy	Authors	Title	Year	Conference /Journal	Cite	Pages

C Unmatched Concepts

This section lists those concepts for which no matches were found. The most likely cause is a mistake in the regular expression used to find the concept, but it is also possible that some concept simply is not mentioned in any of the documents.

Table 23: Unmatched Concepts

Type	Name	CaseSensitive	Revision
Algorithms	IGT	Y	0
Algorithms	NEH	Y	0
Algorithms	bi-partite matching		0
Algorithms	energetic reasoning		0
Algorithms	max-flow		0
Algorithms	not-first		0
Algorithms	not-last		0
Algorithms	sweep		0
Benchmarks	gitlab		0
Benchmarks	industry partner		0
Benchmarks	instance generator		0
Benchmarks	supplementary material		0
Benchmarks	zenodo		0
CPSystems	CPO		0
CPSystems	Choco Solver		0
CPSystems	Chuffed		0
CPSystems	ECLiPSe		0
CPSystems	Gecode		0
CPSystems	MiniZinc		0
CPSystems	OR-Tools		0
CPSystems	SCIP	Y	0
CPSystems	SICStus		0
CPSystems	Z3		0
ProgLanguages	C		0
ProgLanguages	Julia		0
ProgLanguages	Lisp		0
ProgLanguages	Python		0
Industries	IT industry	Y	0
Industries	PCB industry		0
Industries	aerospace industry		0
Industries	agricultural industry		0
Industries	agrifood industry		0
Industries	airline industry		0
Industries	aviation industry		0
Industries	cable industry		0
Industries	carpet industry		0
Industries	chemical industry		0
Industries	chemical processing industry		0
Industries	chemistry industry		0
Industries	chips industry		0
Industries	circuit boards industry		0
Industries	control system industry		0
Industries	cutting industry		0
Industries	dairy industry		0
Industries	dismantling industry		0
Industries	drawing industry		0
Industries	electricity industry		0
Industries	electronics industry		0
Industries	electroplating industry		0

Table 23: Unmatched Concepts

Type	Name	CaseSensitive	Revision
Industries	energy industry		0
Industries	fashion industry		0
Industries	food industry		0
Industries	food-processing industry		0
Industries	forest industry		0
Industries	forging industry		0
Industries	foundry industry		0
Industries	garment industry		0
Industries	gas industry		0
Industries	glass industry		0
Industries	heavy industry		0
Industries	insulation industry		0
Industries	leisure industry		0
Industries	lumber industry		0
Industries	manufacturing industry		0
Industries	maritime industry		0
Industries	metal industry		0
Industries	metalworking industry		0
Industries	mineral industry		0
Industries	mining industry		0
Industries	nuclear industry		0
Industries	oil industry		0
Industries	packaging industry		0
Industries	painting industry		0
Industries	paper industry		0
Industries	petro-chemical industry		0
Industries	pharmaceutical industry		0
Industries	potash industry		0
Industries	power industry		0
Industries	printing industry		0
Industries	process industry		0
Industries	processing industry		0
Industries	railway industry		0
Industries	repair industry		0
Industries	retail industry		0
Industries	semiconductor industry		0
Industries	semiprocess industry		0
Industries	service industry		0
Industries	ship repair industry		0
Industries	shipping industry		0
Industries	software industry		0
Industries	solar cell industry		0
Industries	steel industry		0
Industries	steel making industry		0
Industries	sugar industry		0
Industries	taxi industry		0
Industries	telecommunication industry		0
Industries	textile industry		0
Industries	tire industry		0
Industries	tourism industry		0
Industries	trade industry		0
Industries	transportation industry		0
Industries	wind industry		0
ApplicationAreas	COVID		0
ApplicationAreas	HVAC		0
ApplicationAreas	agriculture		0

Table 23: Unmatched Concepts

Type	Name	CaseSensitive	Revision
ApplicationAreas	aircraft		0
ApplicationAreas	cable tree		0
ApplicationAreas	container terminal		0
ApplicationAreas	dairies		0
ApplicationAreas	dairy		0
ApplicationAreas	datacenter		0
ApplicationAreas	datacentre		0
ApplicationAreas	day-ahead market		0
ApplicationAreas	deep space		0
ApplicationAreas	drone		0
ApplicationAreas	earth observation		0
ApplicationAreas	earth orbit		0
ApplicationAreas	electroplating		0
ApplicationAreas	emergency service		0
ApplicationAreas	energy-price		0
ApplicationAreas	farming		0
ApplicationAreas	forestry		0
ApplicationAreas	hoist		0
ApplicationAreas	medical		0
ApplicationAreas	offshore		0
ApplicationAreas	operating room		0
ApplicationAreas	oven scheduling		0
ApplicationAreas	patient		0
ApplicationAreas	perfect-square		0
ApplicationAreas	physician		0
ApplicationAreas	pipeline		0
ApplicationAreas	radiation therapy		0
ApplicationAreas	real-time pricing		0
ApplicationAreas	satellite		0
ApplicationAreas	semiconductor		0
ApplicationAreas	ship building		0
ApplicationAreas	shipping line		0
ApplicationAreas	steel cable		0
ApplicationAreas	steel mill		0
ApplicationAreas	super-computer		0
ApplicationAreas	surgery		0
ApplicationAreas	torpedo		0
ApplicationAreas	vaccine		0
ApplicationAreas	yard crane		0
Constraints	AllDiff constraint		0
Constraints	AllDiffPrec constraint		0
Constraints	AlwaysConstant		0
Constraints	Arithmetic constraint		0
Constraints	BinPacking constraint		0
Constraints	Blocking constraint		0
Constraints	BufferedResource		0
Constraints	Calendar constraint		0
Constraints	CumulativeCost		0
Constraints	Cumulatives constraint		0
Constraints	Diff2 constraint		0
Constraints	Element constraint		0
Constraints	GeneralizedAllDiffPrec		0
Constraints	IloAlternative		0
Constraints	IloAlwaysIn		0
Constraints	IloForbidEnd		0
Constraints	IloNoOverlap		0

Table 23: Unmatched Concepts

Type	Name	CaseSensitive	Revision
Constraints	IloPack		0
Constraints	IloPulse		0
Constraints	MinWeightAllDiff		0
Constraints	PreemptiveNoOverlap		0
Constraints	Pulse constraint		0
Constraints	RelSoftCumulative		0
Constraints	RelSoftCumulativeSum		0
Constraints	SoftCumulative		0
Constraints	SoftCumulativeSum		0
Constraints	TaskIntersection constraint		0
Constraints	UTVPI constraint		0
Constraints	WeightAllDiff		0
Constraints	WeightedSum		0
Constraints	WeightedTaskSum		0
Constraints	alternative constraint		0
Constraints	alwaysEqual constraint		0
Constraints	alwaysIn		0
Constraints	bin-packing		0
Constraints	diffn		0
Constraints	endBeforeStart		0
Constraints	geost		0
Constraints	noOverlap		0
Constraints	regular expression		0
Constraints	span constraint		0
Classification	2BPHFSP	Y	1
Classification	BPCTOP	Y	1
Classification	Bulk Port Cargo Throughput Optimisation Problem		0
Classification	CECSP	Y	1
Classification	CHSP	Y	1
Classification	CTW	Y	1
Classification	CuSP		0
Classification	EOSP	Y	1
Classification	Earth Observation Scheduling Problem		0
Classification	FJS	Y	1
Classification	Fixed Job Scheduling		0
Classification	GCSP	Y	1
Classification	HFF	Y	1
Classification	HFFTT	Y	1
Classification	HFS	Y	1
Classification	JSPT	Y	1
Classification	JSSP	Y	1
Classification	KRFP	Y	1
Classification	LSFRP	Y	1
Classification	Liner Shipping Fleet Repositioning Problem		0
Classification	MGAP	Y	1
Classification	Modified Generalized Assignment Problem		0
Classification	OSSP	Y	1
Classification	Open Shop Scheduling Problem		0
Classification	PJSSP	Y	1
Classification	PMSP	Y	1
Classification	PP-MS-MMRCPSP	Y	1
Classification	PTC	Y	1
Classification	Pre-emptive Job-Shop scheduling Problem		0
Classification	RCMPSP	Y	1
Classification	RCPSPDC	Y	1
Classification	Resource-constrained Project Scheduling Problem with Discounted Cashflow		0

Table 23: Unmatched Concepts

Type	Name	CaseSensitive	Revision
Classification	SCC	Y	1
Classification	SMSDP	Y	1
Classification	Steel-making and continuous casting		0
Classification	TCSP	Y	1
Classification	Temporal Constraint Satisfaction Problem		0
Classification	psplib		0
Concepts	Allen's algebra		0
Concepts	Benders Decomposition		0
Concepts	Logic-Based Benders Decomposition		0
Concepts	batch process		0
Concepts	blocking constraint		0
Concepts	buffer-capacity		0
Concepts	continuous-process		0
Concepts	flow-time		0
Concepts	lateness		0
Concepts	make to order		0
Concepts	make to stock		1
Concepts	manpower		0
Concepts	no preempt		0
Concepts	no-wait		0
Concepts	producer/consumer		0
Concepts	re-scheduling		0
Concepts	release-date		0
Concepts	stock level		0
Concepts	temporal constraint reasoning		0

D Works by Author

E Other Works

E.1 Books from bibtex

Table 24: Works from bibtex (Total 0)

Key Source	Authors	Title	LC	Cite	Year	Conference /Journal /School	Pages	Nr Cites	Nr Refs	b	c

E.2 PhDThesis from bibtex

Table 25: Works from bibtex (Total 1)

Key Source	Authors	Title	LC	Cite	Year	Conference /Journal /School	Pages	Nr Cites	Nr Refs	b	c
Siala15 Siala15	M. Siala	Search, propagation, and learning in sequencing and scheduling problems. (Recherche, propagation et apprentissage dans les problèmes de séquencement et d'ordonnancement)	Yes	[18]	2015	INSA Toulouse, France	200	0	0	144	n/a

Table 26: Automatically Extracted THESIS Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c
Siala15 [18]	200	earliness, sequence dependent setup, setup-time, lazy clause generation, order, due-date, cmax, machine, job-shop, task, tardiness, resource, scheduling, make-span, activity, open-shop, job, precedence	single machine, TMS, RCPSP, OSP	disjunctive, alldifferent, AtMostSeq, table constraint, GCC constraint, Cardinality constraint, CardPath, circuit, Reified constraint, MultiAtMostSeqCard, AmongSeq constraint, Disjunctive constraint, Regular constraint, Atmost constraint, AtMostSeqCard, Balance constraint, Among constraint, cumulative, cycle		Claire, Ilog Solver, CHIP, OPL, Mistral	automotive, rectangle-packing		Roadef, real-world, random instance, github, CSPlib, benchmark	GRASP, time-tabling, edge-finding	143	n/a

E.3 InBook from bibtex

Table 27: Works from bibtex (Total 0)

Key Source	Authors	Title	LC	Cite	Year	Conference /Journal /School	Pages	Nr Cites	Nr Refs	b	c

E.4 InCollection from bibtex

Table 28: Works from bibtex (Total 0)

Key Source	Authors	Title	LC	Cite	Year	Conference /Journal /School	Pages	Nr Cites	Nr Refs	b	c

Table 29: Automatically Extracted INCOLLECTION Properties (Requires Local Copy)

Work	Pages	Concepts	Classification	Constraints	Prog Languages	CP Systems	Areas	Industries	Benchmarks	Algorithm	a	c

F Background Works

Table 30: Works from bibtex (Total 0)

Key Source	Authors	Title	LC	Cite	Year	Conference /Journal /School	Pages	Nr Cites	Nr Refs	b	c