

CP Papers on Car Sequencing

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March 26, 2024

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 | Authors | Title | LC | Cite | Year | Conference /Journal | 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 | Genetic and evolutionary computation 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, Roadeb, benchmark | | 1 | 18 |
| ButaruH05 [3] | 4 | task, order, job-shop, machine, job | | | C++ | Ilog Solver | | | CSPlib | | 5 | 22 |
| DincbasSH88 [4] | 6 | distributed, job, job-shop, machine, order, precedence, resource, scheduling, task | | Disjunctive constraint, circuit, disjunctive cycle | Prolog | CHIP, OPL | | | real-life | | 9 | 26 |
| GottliebPS03 [7] | 12 | order, scheduling, machine | | | | | | | 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, bench-mark | 0 | | | | | | | 1 | 10 |
| Mayer-EichbergerW13 Mayer-EichbergerW13 [10] | SAT Encodings for the Car Sequencing Problem | | CSPlib, bench-mark, 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 in-stance | 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 in-stance, bench-mark, 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 | Authors | Title | LC | Cite | Year | Conference /Journal | 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 | No | [28] | 2022 | EURASIP Journal on Wireless Communications and Networking | null | 2 | 37 | No | 48 |
| 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 | 49 |
| MoyaCB19 MoyaCB19 | I. Moya, M. Chica, J. Bautista | Constructive metaheuristics for solving the Car Sequencing Problem under uncertain partial demand | No | [12] | 2019 | Computers Industrial Engineering | 1 | 8 | 44 | No | 50 |
| 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 | 51 |
| ZhangGWH17 ZhangGWH17 | X. ZHANG, L. GAO, L. WEN, Z. HUANG | Parallel Construction Heuristic Combined with Constraint Propagation for the Car Sequencing Problem | No | [29] | 2017 | Chinese Journal of Mechanical Engineering | null | 3 | 32 | No | 52 |
| 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 | 53 |
| SialaHH155 SialaHH155 | M. Siala, E. Hebrard, M. Huguet | A study of constraint programming heuristics for the car-sequencing problem | No | [20] | 2015 | Eng. Appl. Artif. Intell. | 11 | 15 | 10 | No | 54 |
| GolleRB14 GolleRB14 | U. Golle, F. Rothlauf, N. Boysen | Iterative beam search for car sequencing | No | [6] | 2014 | Annals of Operations Research | null | 15 | 15 | No | 55 |
| 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 | 47 | 56 |
| OzturkTHO13 OzturkTHO13 | C. Öztürk, S. Tunali, B. Hnich, M. Arslan Ornek | Balancing and scheduling of flexible mixed model assembly lines | No | [13] | 2013 | Constraints An Int. J. | 36 | 31 | 44 | No | 57 |
| BoysenFS09 BoysenFS09 | N. Boysen, M. Flidner, A. Scholl | Sequencing mixed-model assembly lines: Survey, classification and model critique | No | [2] | 2009 | European Journal of Operational Research | null | 308 | 167 | No | 58 |
| HoevePRS09 HoevePRS09 | Willem-Jan van Hoeve, G. Pesant, L. Rousseau, A. Sabharwal | New filtering algorithms for combinations of among constraints | No | [24] | 2009 | Constraints An Int. J. | null | 13 | 8 | No | 59 |
| 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 | 60 |
| 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 | No | [21] | 2008 | European Journal of Operational Research | 16 | 146 | 22 | No | 61 |
| Kis04 Kis04 | T. Kis | On the complexity of the car sequencing problem | No | [9] | 2004 | Operations Research Letters | null | 69 | 3 | No | 62 |
| 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 | 63 |
| 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 | 64 |
| 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 | 65 |
| 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 | 46 | 66 |

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 |
|------------------|-------|--|----------------|--|-------------------|---------------|-------|------------|------------------------------|-----------|----|----|
| ParrelloK86 [14] | 42 | job-shop, machine, scheduling, job, order | | | Prolog | OPL | nurse | | real-life | | 45 | 66 |
| SialaHH14 [19] | 27 | resource, scheduling, order | | AtMostSeqCard, Atmost constraint, Cardinality constraint, AmongSeq constraint, CardPath, Reg- ular constraint, MultiAtMostSe- qCard, AtMost- Seq, Among constraint | | CHIP | | | Roadef, CSPlib, benchmark | | 35 | 56 |

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 | Heuristic approaches for the car sequencing problems with block batches | | | 0 | | | | | | | 27 | No |
| YuLZCLW22 [28] | | | | | | | | | | | | |
| WinterM21 | Constraint-based Scheduling for Paint Shops in the Automotive Supply Industry | | | 0 | | | | | | | 28 | No |
| WinterM21 [26] | | | | | | | | | | | | |
| MoyaCB19 | Constructive metaheuristics for solving the Car Sequencing Problem under uncertain partial demand | | | 0 | | | | | | | 29 | No |
| MoyaCB19 [12] | | | | | | | | | | | | |
| YavuzE18 | Advanced constraint propagation for the combined car sequencing and level scheduling problem | | | 0 | | | | | | | 30 | No |
| YavuzE18 [27] | | | | | | | | | | | | |
| ZhangGWH17 | Parallel Construction Heuristic Combined with Constraint Propagation for the Car Sequencing Problem | | | 0 | | | | | | | 31 | No |
| ZhangGWH17 [29] | | | | | | | | | | | | |
| MazurN15 | 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 |
| MazurN15 [11] | | | | | | | | | | | | |
| SialaHH155 | A study of constraint programming heuristics for the car-sequencing problem | | | 0 | | | | | | | 33 | No |
| SialaHH155 [20] | | | | | | | | | | | | |
| GollerRB14 | Iterative beam search for car sequencing | | | 0 | | | | | | | 34 | No |
| GollerRB14 [6] | | | | | | | | | | | | |
| SialaHH14 | An optimal arc consistency algorithm for a particular case of sequence constraint | | Roadef, CSPLib, benchmark | 0 | | | | | | | 35 | 47 |
| SialaHH14 [19] | | | | | | | | | | | | |
| OzturkTHO13 | Balancing and scheduling of flexible mixed model assembly lines | | | 0 | | | | | | | 36 | No |
| OzturkTHO13 [13] | | | | | | | | | | | | |
| BoysenFS09 | Sequencing mixed-model assembly lines: Survey, classification and model critique | | | 0 | | | | | | | 37 | No |
| BoysenFS09 [2] | | | | | | | | | | | | |
| HoevePRS09 | New filtering algorithms for combinations of among constraints | | | 0 | | | | | | | 38 | No |
| HoevePRS09 [24] | | | | | | | | | | | | |
| Schaus09 | Solving balancing and bin-packing problems with constraint programming | | | 0 | | | | | | | 39 | No |
| Schaus09 [17] | | | | | | | | | | | | |
| SolnonCNA08 | The car sequencing problem: Overview of state-of-the-art methods and industrial case-study of the ROADEF'2005 challenge problem | | | 0 | | | | | | | 40 | No |
| SolnonCNA08 [21] | | | | | | | | | | | | |
| Kis04 | On the complexity of the car sequencing problem | | | 0 | | | | | | | 41 | No |
| Kis04 [9] | | | | | | | | | | | | |
| Gent98 | Two results on car-sequencing problems | | | 0 | | | | | | | 42 | No |
| Gent98 [5] | | | | | | | | | | | | |
| WarwickT95 | Tackling Car Sequencing Problems Using a Generic Genetic Algorithm | | | 0 | | | | | | | 43 | No |
| WarwickT95 [25] | | | | | | | | | | | | |
| HindiP94 | Formulation and solution of a selection and sequencing problem in car manufacture | | | 0 | | | | | | | 44 | No |
| HindiP94 [8] | | | | | | | | | | | | |
| ParrelloK86 | Job-Shop Scheduling Using Automated Reasoning: A Case Study of the Car-Sequencing Problem | | real-life | 0 | | | | | | | 45 | 46 |
| ParrelloK86 [14] | | | | | | | | | | | | |

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 Régim | 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 | Authors | Title | LC | Cite | Year | Conference /Journal | Pages | Nr Cites | Nr Refs | b | c |
|----------------------------------|--|---|-----|------|------|---|-------|----------|---------|-----|-----|
| BoysenFS09 BoysenFS09 | N. Boysen, M. Flidner, A. Scholl | Sequencing mixed-model assembly lines: Survey, classification and model critique | No | [2] | 2009 | European Journal of Operational Research | null | 308 | 167 | No | 58 |
| 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 | No | [21] | 2008 | European Journal of Operational Research | 16 | 146 | 22 | No | 61 |
| 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 | 46 | 66 |
| Kis04 Kis04 | T. Kis | On the complexity of the car sequencing problem | No | [9] | 2004 | Operations Research Letters | null | 69 | 3 | No | 62 |
| 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 | No | [13] | 2013 | Constraints An Int. J. | 36 | 31 | 44 | No | 57 |
| 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 | 64 |
| 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 | 65 |
| 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 | No | [20] | 2015 | Eng. Appl. Artif. Intell. | 11 | 15 | 10 | No | 54 |
| GolleRB14 GolleRB14 | U. Golle, F. Rothlauf, N. Boysen | Iterative beam search for car sequencing | No | [6] | 2014 | Annals of Operations Research | null | 15 | 15 | No | 55 |
| HoevePRS09 HoevePRS09 | Willem-Jan van Hoeve, G. Pesant, L. Rousseau, A. Sabharwal | New filtering algorithms for combinations of among constraints | No | [24] | 2009 | Constraints An Int. J. | null | 13 | 8 | No | 59 |
| MoyaCB19 MoyaCB19 | I. Moya, M. Chica, J. Bautista | Constructive metaheuristics for solving the Car Sequencing Problem under uncertain partial demand | No | [12] | 2019 | Computers Industrial Engineering | 1 | 8 | 44 | No | 50 |
| 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 | 47 | 56 |
| ZhangGWH17 ZhangGWH17 | X. ZHANG, L. GAO, L. WEN, Z. HUANG | Parallel Construction Heuristic Combined with Constraint Propagation for the Car Sequencing Problem | No | [29] | 2017 | Chinese Journal of Mechanical Engineering | null | 3 | 32 | No | 52 |
| 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 | No | [28] | 2022 | EURASIP Journal on Wireless Communications and Networking | null | 2 | 37 | No | 48 |
| 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 séquençement et d'ordonnancement) | Yes | [18] | 2015 | INSA Toulouse, France | 200 | 0 | 0 | 134 | n/a |

Table 9: Works from bibtex (Total 29)

| Key | Authors | Title | LC | Cite | Year | Conference /Journal | 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 | 63 |
| 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 | 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 | 51 |
| 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 | 49 |
| ThiruvadyME11 ThiruvadyME11 | Dhananjay Raghavan Thiruvady, B. Meyer, A. Ernst | Car sequencing with constraint-based ACO | No | [22] | 2011 | Genetic and evolutionary computation 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 | 53 |
| 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 | Allen's algebra | | | |
| Concepts | BOM | | | |
| Concepts | Benders Decomposition | | | |
| Concepts | Logic-Based Benders Decomposition | | | |
| Concepts | activity | Siala15 [18] | | ArtiguesHM0W14 [1] |
| Concepts | batch process | | | |
| Concepts | bill of material | | | |
| Concepts | blocking constraint | | | |
| Concepts | buffer-capacity | | | |
| Concepts | cmax | Siala15 [18] | | |
| Concepts | completion-time | | | |
| Concepts | continuous-process | | | |
| Concepts | distributed | | | DincbasSH88 [4] |
| Concepts | due-date | | | Siala15 [18] |
| Concepts | earliness | | | Siala15 [18] |
| Concepts | flow-shop | | | |
| Concepts | flow-time | | | |
| Concepts | inventory | | | |
| Concepts | job | Siala15 [18], ParrelloK86 [14] | PerronS04 [15] | ButaruH05 [3], DincbasSH88 [4] |
| Concepts | job-shop | Siala15 [18], ParrelloK86 [14] | PerronS04 [15] | ButaruH05 [3], DincbasSH88 [4] |
| Concepts | lateness | | | |
| Concepts | lazy clause generation | Siala15 [18] | | ArtiguesHM0W14 [1] |
| Concepts | machine | Siala15 [18] | | ButaruH05 [3], GottliebPS03 [7], ReginP97 [16], DincbasSH88 [4], ParrelloK86 [14] |
| Concepts | make to order | | | |
| Concepts | make to stock | | | |
| Concepts | make-span | Siala15 [18] | | |
| Concepts | manpower | | | |
| Concepts | multi-agent | | | |
| Concepts | no preempt | | | |
| Concepts | no-wait | | | |
| Concepts | open-shop | Siala15 [18] | | |
| Concepts | order | Siala15 [18], SialaHH14 [19], HoevePRS06 [23], ButaruH05 [3], PerronS04 [15], GottliebPS03 [7], ReginP97 [16], DincbasSH88 [4], ParrelloK86 [14] | ArtiguesHM0W14 [1] | |
| Concepts | precedence | Siala15 [18], DincbasSH88 [4] | | |
| Concepts | preempt | | | |
| Concepts | producer/consumer | | | |
| Concepts | re-scheduling | | | |
| Concepts | release-date | | | |
| Concepts | resource | Siala15 [18] | DincbasSH88 [4] | SialaHH14 [19], PerronS04 [15], ReginP97 [16] |
| Concepts | scheduling | Siala15 [18], DincbasSH88 [4], ParrelloK86 [14] | PerronS04 [15], ReginP97 [16] | SialaHH14 [19], Mayer-EichbergerW13 [10], GottliebPS03 [7] |
| Concepts | sequence dependent setup | | | Siala15 [18] |
| Concepts | setup-time | | | Siala15 [18] |
| Concepts | stock level | | | |
| Concepts | tardiness | | | Siala15 [18] |
| Concepts | task | Siala15 [18], DincbasSH88 [4] | | Mayer-EichbergerW13 [10], ButaruH05 [3] |
| Concepts | temporal constraint reasoning | | | |

Table 10: Works for Concepts of Type Concepts

| Type | Keyword | High | Medium | Low |
|----------|----------------|------|--------|-----------------|
| Concepts | transportation | | | HoevePRS06 [23] |

7.2 Concept Type Classification

Table 11: Works for Concepts of Type Classification

| Type | Keyword | High | Medium | Low |
|----------------|---|--------------|--------|--------------|
| Classification | 2BPHFSP | | | |
| Classification | BPCTOP | | | |
| Classification | Bulk Port Cargo Throughput Optimi- sation Problem | | | |
| Classification | CECSP | | | |
| Classification | CHSP | | | |
| Classification | CTW | | | |
| Classification | CuSP | | | |
| Classification | EOSP | | | |
| Classification | Earth Observation Scheduling Problem | | | |
| Classification | FJS | | | |
| Classification | Fixed Job Scheduling | | | |
| Classification | GCSP | | | |
| Classification | HFF | | | |
| Classification | HFFTT | | | |
| Classification | HFS | | | |
| Classification | JSPT | | | |
| Classification | JSSP | | | |
| Classification | KRFP | | | |
| Classification | LSFRP | | | |
| Classification | Liner Shipping Fleet Repositioning Problem | | | |
| Classification | MGAP | | | |
| Classification | Modified Generalized Assignment Problem | | | |
| Classification | OSP | Siala15 [18] | | |
| Classification | OSSP | | | |
| Classification | Open Shop Scheduling Problem | | | |
| Classification | PJSSP | | | |
| Classification | PMSP | | | |
| Classification | PP-MS-MMRCPP | | | |
| Classification | PTC | | | |
| Classification | Pre-emptive Job-Shop scheduling Problem | | | |
| Classification | RCMPSP | | | |
| Classification | RCPSP | | | Siala15 [18] |
| Classification | RCPSPDC | | | |
| Classification | Resource-constrained Project Scheduling Problem with Dis- counted Cashflow | | | |
| Classification | SBSFMMAL | | | |
| Classification | SCC | | | |
| Classification | SMSDP | | | |
| Classification | Steel-making and con- tinuous casting | | | |
| Classification | TCSP | | | |
| Classification | TMS | | | Siala15 [18] |

Table 11: Works for Concepts of Type Classification

| Type | Keyword | High | Medium | Low |
|----------------|--|------|--------|--------------|
| Classification | Temporal Constraint Satisfaction Problem | | | |
| Classification | parallel machine | | | |
| Classification | psplib | | | |
| Classification | single machine | | | Siala15 [18] |

7.3 Concept Type Constraints

Table 12: Works for Concepts of Type Constraints

| Type | Keyword | High | Medium | Low |
|-------------|-----------------------------|---|------------------------------|------------------------------|
| Constraints | AllDiff constraint | | | |
| Constraints | AllDiffPrec constraint | | | |
| Constraints | AlwaysConstant | | | |
| Constraints | Among constraint | Siala15 [18], SialaHH14 [19], HoevePRS06 [23] | | ArtiguesHM0W14 [1] |
| Constraints | AmongSeq constraint | | Siala15 [18], SialaHH14 [19] | |
| Constraints | Arithmetic constraint | | | |
| Constraints | AtMostSeq | Siala15 [18], SialaHH14 [19] | | |
| Constraints | AtMostSeqCard | Siala15 [18], SialaHH14 [19] | | |
| Constraints | Atmost constraint | Siala15 [18], SialaHH14 [19] | | Mayer-EichbergerW13 [10] |
| Constraints | Balance constraint | | | Siala15 [18] |
| Constraints | BinPacking constraint | | | |
| Constraints | Blocking constraint | | | |
| Constraints | BufferedResource | | | |
| Constraints | Calendar constraint | | | |
| Constraints | CardPath | | | Siala15 [18], SialaHH14 [19] |
| Constraints | Cardinality constraint | Siala15 [18], SialaHH14 [19], ArtiguesHM0W14 [1], Mayer-EichbergerW13 [10], ReginP97 [16] | HoevePRS06 [23] | |
| Constraints | Channeling constraint | | | |
| Constraints | CumulativeCost | | | |
| Constraints | Cumulatives constraint | | | |
| Constraints | Diff2 constraint | | | |
| Constraints | Disjunctive constraint | DincbasSH88 [4] | Siala15 [18] | |
| Constraints | Element constraint | | | |
| Constraints | GCC constraint | | | Siala15 [18] |
| Constraints | GeneralizedAllDiffPrec | | | |
| Constraints | IloAlternative | | | |
| Constraints | IloAlwaysIn | | | |
| Constraints | IloForbidEnd | | | |
| Constraints | IloNoOverlap | | | |
| Constraints | IloPack | | | |
| Constraints | IloPulse | | | |
| Constraints | MinWeightAllDiff | | | |
| Constraints | MultiAtMostSeqCard | Siala15 [18] | SialaHH14 [19] | |
| Constraints | PreemptiveNoOverlap | | | |
| Constraints | Pulse constraint | | | |
| Constraints | Regular constraint | Siala15 [18], SialaHH14 [19] | HoevePRS06 [23] | |
| Constraints | Reified constraint | | | Siala15 [18] |
| Constraints | RelSoftCumulative | | | |
| Constraints | RelSoftCumulativeSum | | | |
| Constraints | SoftCumulative | | | |
| Constraints | SoftCumulativeSum | | | |
| Constraints | TaskIntersection constraint | | | |
| Constraints | UTVPI constraint | | | |
| Constraints | WeightAllDiff | | | |
| Constraints | WeightedSum | | | |
| Constraints | WeightedTaskSum | | | |
| Constraints | alldifferent | Siala15 [18] | | |
| Constraints | alternative constraint | | | |
| Constraints | alwaysEqual constraint | | | |
| Constraints | alwaysIn | | | |

Table 12: Works for Concepts of Type Constraints

| Type | Keyword | High | Medium | Low |
|-------------|--------------------|-------------------------------|--|-----------------------------|
| Constraints | bin-packing | | | |
| Constraints | circuit | | Siala15 [18], DincbasSH88 [4] | |
| Constraints | cumulative | | ArtiguesHM0W14 [1], Mayer-EichbergerW13 [10] | Siala15 [18], ReginP97 [16] |
| Constraints | cycle | GottliebPS03 [7] | Siala15 [18] | |
| Constraints | diffn | | | |
| Constraints | disjunctive | Siala15 [18], DincbasSH88 [4] | | |
| Constraints | endBeforeStart | | | |
| Constraints | geost | | | |
| Constraints | noOverlap | | | |
| Constraints | regular expression | | | |
| Constraints | span constraint | | | |
| 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 | | | |
| ProgLanguages | C++ | | | ButaruH05 [3] |
| ProgLanguages | Java | | | |
| ProgLanguages | Julia | | | |
| ProgLanguages | Lisp | | | |
| ProgLanguages | Prolog | DincbasSH88 [4], ParrelloK86 [14] | | |
| ProgLanguages | Python | | | |

7.5 Concept Type CPSystems

Table 14: Works for Concepts of Type CPSystems

| Type | Keyword | High | Medium | Low |
|-----------|----------------|-----------------|--------------------|--|
| CPSystems | CHIP | DincbasSH88 [4] | | Siala15 [18], SialaHH14 [19], HoevePRS06 [23], ReginP97 [16] |
| CPSystems | CPO | | | |
| CPSystems | Choco Solver | | | |
| CPSystems | Chuffed | | | |
| CPSystems | Claire | Siala15 [18] | | |
| CPSystems | Cplex | | | |
| CPSystems | ECLiPSe | | | |
| CPSystems | Gecode | | | |
| CPSystems | Gurobi | | | |
| CPSystems | Ilog Scheduler | | | PerronS04 [15], ReginP97 [16] |
| CPSystems | Ilog Solver | | ReginP97 [16] | Siala15 [18], HoevePRS06 [23], ButaruH05 [3] |
| CPSystems | MiniZinc | | | |
| CPSystems | Mistral | Siala15 [18] | ArtiguesHM0W14 [1] | |
| CPSystems | OPL | | | Siala15 [18], DincbasSH88 [4], ParrelloK86 [14] |
| CPSystems | OR-Tools | | | |
| CPSystems | OZ | | | PerronS04 [15] |
| CPSystems | SCIP | | | |
| CPSystems | SICStus | | | |
| CPSystems | Z3 | | | |

7.6 Concept Type ApplicationAreas

Table 15: Works for Concepts of Type ApplicationAreas

| Type | Keyword | High | Medium | Low |
|------------------|--------------------|------|--------|-----------------------------------|
| ApplicationAreas | COVID | | | |
| ApplicationAreas | HVAC | | | |
| ApplicationAreas | agriculture | | | |
| ApplicationAreas | aircraft | | | |
| ApplicationAreas | automotive | | | Siala15 [18], ReginP97 [16] |
| ApplicationAreas | cable tree | | | |
| ApplicationAreas | car manufacturing | | | |
| ApplicationAreas | container terminal | | | |
| ApplicationAreas | crew-scheduling | | | ReginP97 [16] |
| ApplicationAreas | dairies | | | |
| ApplicationAreas | dairy | | | |
| ApplicationAreas | datacenter | | | |
| ApplicationAreas | datacentre | | | |
| ApplicationAreas | day-ahead market | | | |
| ApplicationAreas | deep space | | | |
| ApplicationAreas | drone | | | |
| ApplicationAreas | earth observation | | | |
| ApplicationAreas | earth orbit | | | |
| ApplicationAreas | electroplating | | | |
| ApplicationAreas | emergency service | | | |
| ApplicationAreas | energy-price | | | |
| ApplicationAreas | farming | | | |
| ApplicationAreas | forestry | | | |
| ApplicationAreas | hoist | | | |
| ApplicationAreas | medical | | | |
| ApplicationAreas | nurse | | | HoevePRS06 [23], ParrelloK86 [14] |
| ApplicationAreas | offshore | | | |
| ApplicationAreas | operating room | | | |
| ApplicationAreas | oven scheduling | | | |
| ApplicationAreas | patient | | | |
| ApplicationAreas | perfect-square | | | |
| ApplicationAreas | physician | | | |
| ApplicationAreas | pipeline | | | |
| ApplicationAreas | radiation therapy | | | |
| ApplicationAreas | railway | | | |
| ApplicationAreas | real-time pricing | | | |
| ApplicationAreas | rectangle-packing | | | Siala15 [18] |
| ApplicationAreas | robot | | | |
| ApplicationAreas | satellite | | | |
| ApplicationAreas | semiconductor | | | |
| ApplicationAreas | ship building | | | |
| ApplicationAreas | shipping line | | | |
| ApplicationAreas | steel cable | | | |
| ApplicationAreas | steel mill | | | |
| ApplicationAreas | super-computer | | | |
| ApplicationAreas | surgery | | | |
| ApplicationAreas | torpedo | | | |
| ApplicationAreas | vaccine | | | |
| ApplicationAreas | yard crane | | | |

7.7 Concept Type Industries

Table 16: Works for Concepts of Type Industries

| Type | Keyword | High | Medium | Low |
|------------|------------------------------|------|--------|-----|
| Industries | IT industry | | | |
| Industries | PCB industry | | | |
| Industries | aerospace industry | | | |
| Industries | agricultural industry | | | |
| Industries | agrifood industry | | | |
| Industries | airline industry | | | |
| Industries | automobile industry | | | |
| Industries | automotive industry | | | |
| Industries | aviation industry | | | |
| Industries | cable industry | | | |
| Industries | carpet industry | | | |
| Industries | chemical industry | | | |
| Industries | chemical processing industry | | | |
| Industries | chemistry industry | | | |
| Industries | chips industry | | | |
| Industries | circuit boards industry | | | |
| Industries | control system industry | | | |
| Industries | cutting industry | | | |
| Industries | dairy industry | | | |
| Industries | dismantling industry | | | |
| Industries | drawing industry | | | |
| Industries | electricity industry | | | |
| Industries | electricity industry | | | |
| Industries | electronics industry | | | |
| Industries | electroplating industry | | | |
| Industries | energy industry | | | |
| Industries | fashion industry | | | |
| Industries | food industry | | | |
| Industries | food-processing industry | | | |
| Industries | forest industry | | | |
| Industries | forging industry | | | |
| Industries | foundry industry | | | |
| Industries | garment industry | | | |
| Industries | gas industry | | | |
| Industries | glass industry | | | |
| Industries | heavy industry | | | |
| Industries | insulation industry | | | |
| Industries | leisure industry | | | |
| Industries | lumber industry | | | |
| Industries | manufacturing industry | | | |
| Industries | maritime industry | | | |
| Industries | metal industry | | | |
| Industries | metalworking industry | | | |
| Industries | mineral industry | | | |
| Industries | mining industry | | | |
| Industries | nuclear industry | | | |
| Industries | oil industry | | | |
| Industries | packaging industry | | | |
| Industries | painting industry | | | |
| Industries | paper industry | | | |
| Industries | petro-chemical industry | | | |

Table 16: Works for Concepts of Type Industries

| Type | Keyword | High | Medium | Low |
|------------|----------------------------|------|--------|-----|
| Industries | pharmaceutical industry | | | |
| Industries | potash industry | | | |
| Industries | power industry | | | |
| Industries | printing industry | | | |
| Industries | process industry | | | |
| Industries | processing industry | | | |
| Industries | railway industry | | | |
| Industries | repair industry | | | |
| Industries | retail industry | | | |
| Industries | semiconductor industry | | | |
| Industries | semiprocess industry | | | |
| Industries | service industry | | | |
| Industries | ship repair industry | | | |
| Industries | shipping industry | | | |
| Industries | software industry | | | |
| Industries | solar cell industry | | | |
| Industries | steel industry | | | |
| Industries | steel making industry | | | |
| Industries | sugar industry | | | |
| Industries | taxi industry | | | |
| Industries | telecommunication industry | | | |
| Industries | textile industry | | | |
| Industries | tire industry | | | |
| Industries | tourism industry | | | |
| Industries | trade industry | | | |
| Industries | transportation industry | | | |
| Industries | wind industry | | | |

7.8 Concept Type Benchmarks

Table 17: Works for Concepts of Type Benchmarks

| Type | Keyword | High | Medium | Low |
|------------|------------------------|---|----------------------------------|--|
| Benchmarks | CSPLib | Siala15 [18], ArtiguesHM0W14 [1], Mayer-EichbergerW13 [10] | SialaHH14 [19], GottliebPS03 [7] | ButaruH05 [3] |
| Benchmarks | Roadef | Siala15 [18] | | SialaHH14 [19], ArtiguesHM0W14 [1] |
| Benchmarks | benchmark | Siala15 [18], SialaHH14 [19], Mayer-EichbergerW13 [10], GottliebPS03 [7] | | ArtiguesHM0W14 [1], ReginP97 [16] |
| Benchmarks | bitbucket | | | |
| Benchmarks | generated instance | | | PerronS04 [15] |
| Benchmarks | github | | Siala15 [18] | ArtiguesHM0W14 [1], Mayer-EichbergerW13 [10] |
| Benchmarks | gitlab | | | |
| Benchmarks | industrial instance | | | |
| Benchmarks | industrial partner | | | |
| Benchmarks | industry partner | | | |
| Benchmarks | instance generator | | | |
| Benchmarks | random instance | | | Siala15 [18], ReginP97 [16] |
| Benchmarks | real-life | | DincbasSH88 [4] | HoevePRS06 [23], ReginP97 [16], ParrelloK86 [14] |
| Benchmarks | real-world | | | Siala15 [18], GottliebPS03 [7] |
| Benchmarks | supplementary material | | | |
| Benchmarks | zenodo | | | |

7.9 Concept Type Algorithms

Table 18: Works for Concepts of Type Algorithms

| Type | Keyword | High | Medium | Low |
|------------|---------------------|------|--------------|---------------|
| Algorithms | GRASP | | | Siala15 [18] |
| Algorithms | IGT | | | |
| Algorithms | NEH | | | |
| Algorithms | bi-partite matching | | | |
| Algorithms | edge-finder | | | ReginP97 [16] |
| Algorithms | edge-finding | | Siala15 [18] | |
| Algorithms | energetic reasoning | | | |
| Algorithms | max-flow | | | |
| Algorithms | not-first | | | |
| Algorithms | not-last | | | |
| Algorithms | sweep | | | |
| Algorithms | time-tabling | | Siala15 [18] | ReginP97 [16] |

References

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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 | Genetic and evolutionary computation 2011 | [22] |

Table 20: ARTICLE without Local Copy

| Key | URL | Authors | Title | Year | Conference /Journal | Cite |
|-------------|-------------|--|--|------|---|------|
| YuLZCLW22 | YuLZCLW22 | Y. Yu, X. Lu, T. Zhao, M. Cheng, L. Liu, W. Wei | Heuristic approaches for the car sequencing problems with block batches | 2022 | EURASIP Journal on Wireless Communications and Networking | [28] |
| 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] |
| MoyaCB19 | MoyaCB19 | I. Moya, M. Chica, J. Bautista | Constructive metaheuristics for solving the Car Sequencing Problem under uncertain partial demand | 2019 | Computers Industrial Engineering | [12] |
| YavuzE18 | YavuzE18 | M. Yavuz, H. Ergin | Advanced constraint propagation for the combined car sequencing and level scheduling problem | 2018 | Computers Operations Research | [27] |
| ZhangGWH17 | ZhangGWH17 | X. ZHANG, L. GAO, L. WEN, Z. HUANG | Parallel Construction Heuristic Combined with Constraint Propagation for the Car Sequencing Problem | 2017 | Chinese Journal of Mechanical Engineering | [29] |
| 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] |
| SialaHH155 | SialaHH155 | M. Siala, E. Hebrard, M. Huguet | A study of constraint programming heuristics for the car-sequencing problem | 2015 | Eng. Appl. Artif. Intell. | [20] |
| GolleRB14 | GolleRB14 | U. Golle, F. Rothlauf, N. Boysen | Iterative beam search for car sequencing | 2014 | Annals of Operations Research | [6] |
| OzturkTHO13 | OzturkTHO13 | C. Öztürk, S. Tunali, B. Hnich, M. Arslan Ornek | Balancing and scheduling of flexible mixed model assembly lines | 2013 | Constraints An Int. J. | [13] |
| BoysenFS09 | BoysenFS09 | N. Boysen, M. Flidner, A. Scholl | Sequencing mixed-model assembly lines: Survey, classification and model critique | 2009 | European Journal of Operational Research | [2] |
| HoevePRS09 | HoevePRS09 | Willem-Jan van Hoeve, G. Pesant, L. Rousseau, A. Sabharwal | New filtering algorithms for combinations of among constraints | 2009 | Constraints An Int. J. | [24] |
| Schaus09 | Schaus09 | P. Schaus | Solving balancing and bin-packing problems with constraint programming | 2009 | These de doctorat, Université catholique de Louvain | [17] |
| 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 | 2008 | European Journal of Operational Research | [21] |
| Kis04 | Kis04 | T. Kis | On the complexity of the car sequencing problem | 2004 | Operations Research Letters | [9] |
| 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] |

Table 20: ARTICLE without Local Copy

| Key | URL | Authors | Title | Year | Conference /Journal | | Cite |
|----------|----------|--------------------------------|---|------|--------------------------|------------|------|
| HindiP94 | HindiP94 | Khalil S. Hindi, G. Ploszajski | Formulation and solution of a selection and sequencing problem in car manufacture | 1994 | Computers Engineering | Industrial | [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 | bitbucket | | 0 |
| Benchmarks | gitlab | | 0 |
| Benchmarks | industrial instance | | 0 |
| Benchmarks | industrial partner | | 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 | Cplex | | 0 |
| CPSystems | ECLiPSe | | 0 |
| CPSystems | Gecode | | 0 |
| CPSystems | Gurobi | | 0 |
| CPSystems | MiniZinc | | 0 |
| CPSystems | OR-Tools | | 0 |
| CPSystems | SCIP | Y | 0 |
| CPSystems | SICStus | | 0 |
| CPSystems | Z3 | | 0 |
| ProgLanguages | C | | 0 |
| ProgLanguages | Java | | 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 | automobile industry | | 0 |
| Industries | automotive 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 |

Table 23: Unmatched Concepts

| Type | Name | CaseSensitive | Revision |
|------------|----------------------------|---------------|----------|
| 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 | electricity industry | | 0 |
| Industries | electronics industry | | 0 |
| Industries | electroplating industry | | 0 |
| 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 |

Table 23: Unmatched Concepts

| Type | Name | CaseSensitive | Revision |
|------------------|-------------------------|---------------|----------|
| 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 |
| ApplicationAreas | aircraft | | 0 |
| ApplicationAreas | cable tree | | 0 |
| ApplicationAreas | car manufacturing | | 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 | railway | | 0 |
| ApplicationAreas | real-time pricing | | 0 |
| ApplicationAreas | robot | | 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 |

Table 23: Unmatched Concepts

| Type | Name | CaseSensitive | Revision |
|----------------|---|---------------|----------|
| Constraints | Blocking constraint | | 0 |
| Constraints | BufferedResource | | 0 |
| Constraints | Calendar constraint | | 0 |
| Constraints | Channeling 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 |
| 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 |

Table 23: Unmatched Concepts

| Type | Name | CaseSensitive | Revision |
|----------------|--|---------------|----------|
| 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-MMRCPS | 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 |
| Classification | SBSFMMAL | Y | 1 |
| 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 | parallel machine | | 0 |
| Classification | psplib | | 0 |
| Concepts | Allen's algebra | | 0 |
| Concepts | BOM | | 0 |
| Concepts | Benders Decomposition | | 0 |
| Concepts | Logic-Based Benders Decomposition | | 0 |
| Concepts | batch process | | 0 |
| Concepts | bill of material | | 0 |
| Concepts | blocking constraint | | 0 |
| Concepts | buffer-capacity | | 0 |
| Concepts | completion-time | | 0 |
| Concepts | continuous-process | | 0 |
| Concepts | flow-shop | | 0 |
| Concepts | flow-time | | 0 |
| Concepts | inventory | | 0 |
| Concepts | lateness | | 0 |
| Concepts | make to order | | 0 |
| Concepts | make to stock | | 1 |
| Concepts | manpower | | 0 |
| Concepts | multi-agent | | 0 |
| Concepts | no preempt | | 0 |
| Concepts | no-wait | | 0 |
| Concepts | preempt | | 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 | Authors | Title | LC | Cite | Year | Conference /Journal | Pages | Nr Cites | Nr Refs | b | c |
|-----|---------|-------|----|------|------|------------------------|-------|-------------|------------|---|---|
|-----|---------|-------|----|------|------|------------------------|-------|-------------|------------|---|---|

E.2 PhDThesis from bibtex

Table 25: Works from bibtex (Total 1)

| Key | Authors | Title | LC | Cite | Year | Conference /Journal | | 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 séquençement et d'ordonnancement) | Yes | [18] | 2015 | INSA France | Toulouse, | 200 | 0 | 0 | 134 | 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 | 133 | n/a |

E.3 InBook from bibtex

Table 27: Works from bibtex (Total 0)

| Key | Authors | Title | LC | Cite | Year | Conference /Journal | Pages | Nr Cites | Nr Refs | b | c |
|-----|---------|-------|----|------|------|------------------------|-------|-------------|------------|---|---|
|-----|---------|-------|----|------|------|------------------------|-------|-------------|------------|---|---|

E.4 InCollection from bibtex

Table 28: Works from bibtex (Total 0)

| Key | Authors | Title | LC | Cite | Year | Conference /Journal | 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 | Authors | Title | LC | Cite | Year | Conference /Journal | Pages | Nr Cites | Nr Refs | b | c |
|-----|---------|-------|----|------|------|------------------------|-------|-------------|------------|---|---|
|-----|---------|-------|----|------|------|------------------------|-------|-------------|------------|---|---|