# Martin C Cooper

List of Publications by Year
in descending order



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|---|---|---|---|
| 67 papers | 1,509 citations | 430754 18 h-index | 345118 36 g-index |
| 78 all docs | 78 docs citations | 78 times ranked | 350 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Galois Connections for Patterns: An Algebra of Labelled Graphs. Lecture Notes in Computer Science, 2021, , 125-150. | 1.0 | 0 |
| 2 | A lightweight epistemic logic and its application to planning. Artificial Intelligence, 2021, 298, 103437. | 3.9 | 6 |
| 3 | Valued Constraint Satisfaction Problems. , 2020, , 185-207. | | 5 |
| 4 | Strengthening Neighbourhood Substitution. Lecture Notes in Computer Science, 2020, , 126-142. | 1.0 | 0 |
| 5 | On Singleton Arc Consistency for CSPs Defined by Monotone Patterns. Algorithmica, 2019, 81, 1699-1727. | 1.0 | 3 |
| 6 | Binary constraint satisfaction problems defined by excluded topological minors. Information and Computation, 2019, 264, 12-31. | 0.5 | 4 |
| 7 | The epistemic gossip problem. Discrete Mathematics, 2019, 342, 654-663. | 0.4 | 9 |
| 8 | A polynomial relational class of binary CSP. Annals of Mathematics and Artificial Intelligence, 2018, 83, 1-20. | 0.9 | 0 |
| 9 | Domain Reduction for Valued Constraints by Generalising Methods from CSP. Lecture Notes in Computer Science, 2018, , 64-80. | 1.0 | 1 |
| 10 | Binarisation for Valued Constraint Satisfaction Problems. SIAM Journal on Discrete Mathematics, 2017, 31, 2279-2300. | 0.4 | 1 |
| 11 | Extending Broken Triangles and Enhanced Value-Merging. Lecture Notes in Computer Science, 2016, , 173-188. | 1.0 | 4 |
| 12 | The Power of Arc Consistency for CSPs Defined by Partially-Ordered Forbidden Patterns. , 2016, , . | | 5 |
| 13 | Broken triangles: From value merging to a tractable class of general-arity constraint satisfaction problems. Artificial Intelligence, 2016, 234, 196-218. | 3.9 | 11 |
| 14 | Tractability in constraint satisfaction problems: a survey. Constraints, 2016, 21, 115-144. | 0.4 | 24 |
| 15 | Variable and value elimination in binary constraint satisfaction via forbidden patterns. Journal of Computer and System Sciences, 2015, 81, 1127-1143. | 0.9 | 11 |
| 16 | Characterising the complexity of constraint satisfaction problems defined by 2-constraint forbidden patterns. Discrete Applied Mathematics, 2015, 184, 89-113. | 0.5 | 7 |
| 17 | A Microstructure-Based Family of Tractable Classes for CSPs. Lecture Notes in Computer Science, 2015, , 74-88. | 1.0 | 8 |
| 18 | Beyond Consistency and Substitutability. Lecture Notes in Computer Science, 2014, , 256-271. | 1.0 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | MANAGING TEMPORAL CYCLES IN PLANNING PROBLEMS REQUIRING CONCURRENCY. Computational Intelligence, 2013, 29, 111-128. | 2.1 | 7 |
| 20 | Relaxation of Temporal Planning Problems. , 2013, , . | | 2 |
| 21 | An Algebraic Theory of Complexity for Discrete Optimization. SIAM Journal on Computing, 2013, 42, 1915-1939. | 0.8 | 34 |
| 22 | Transformation of optimal planning problems. Journal of Experimental and Theoretical Artificial Intelligence, 2011, 23, 181-199. | 1.8 | 1 |
| 23 | A weighted CSP approach to cost-optimal planning. AI Communications, 2011, 24, 1-29. | 0.8 | 6 |
| 24 | Hybrid tractability of valued constraint problems. Artificial Intelligence, 2011, 175, 1555-1569. | 3.9 | 32 |
| 25 | On Guaranteeing Polynomially Bounded Search Tree Size. Lecture Notes in Computer Science, 2011, , 160-171. | 1.0 | 8 |
| 26 | Tractable Triangles. Lecture Notes in Computer Science, 2011, , 195-209. | 1.0 | 2 |
| 27 | Soft arc consistency revisited. Artificial Intelligence, 2010, 174, 449-478. | 3.9 | 97 |
| 28 | Generalizing constraint satisfaction on trees: Hybrid tractability and variable elimination. Artificial Intelligence, 2010, 174, 570-584. | 3.9 | 54 |
| 29 | Compilation of a High-level Temporal Planning Language into PDDL 2.1. , 2010, , . | | 4 |
| 30 | Solving Temporally-Cyclic Planning Problems. , 2010, , . | | 2 |
| 31 | A New Hybrid Tractable Class of Soft Constraint Problems. Lecture Notes in Computer Science, 2010, , 152-166. | 1.0 | 2 |
| 32 | Transformation de problÃ¨mes de planification optimale. Revue D'Intelligence Artificielle, 2010, 24, 465-484. | 0.5 | 0 |
| 33 | Minimization of Locally Defined Submodular Functions by Optimal Soft Arc Consistency. Constraints, 2008, 13, 437-458. | 0.4 | 19 |
| 34 | Generalising submodularity and horn clauses: Tractable optimization problems defined by tournament pair multimorphisms. Theoretical Computer Science, 2008, 401, 36-51. | 0.5 | 33 |
| 35 | A Rich Discrete Labeling Scheme for Line Drawings of Curved Objects. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2008, 30, 741-745. | 9.7 | 10 |
| 36 | Measuring the Semantic Distance between Languages from a Statistical Analysis of Bilingual Dictionaries*. Journal of Quantitative Linguistics, 2008, 15, 1-33. | 0.7 | 8 |

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|---|---|---|---|
| 37 | Constraints Between Distant Lines in the Labelling of Line Drawings of Polyhedral Scenes. International Journal of Computer Vision, 2007, 73, 195-212. | 10.9 | 5 |
| 38 | The complexity of soft constraint satisfaction. Artificial Intelligence, 2006, 170, 983-1016. | 3.9 | 96 |
| 39 | An Algebraic Characterisation of Complexity for Valued Constraint. Lecture Notes in Computer Science, 2006, , 107-121. | 1.0 | 23 |
| 40 | Supermodular functions and the complexity of MAX CSP. Discrete Applied Mathematics, 2005, 149, 53-72. | 0.5 | 31 |
| 41 | Wireframe Projections: Physical Realisability of Curved Objects and Unambiguous Reconstruction of Simple Polyhedra. International Journal of Computer Vision, 2005, 64, 69-88. | 10.9 | 17 |
| 42 | High-Order Consistency in Valued Constraint Satisfaction. Constraints, 2005, 10, 283-305. | 0.4 | 34 |
| 43 | A Mathematical Model of Historical Semantics and the Grouping of Word Meanings into Concepts. Computational Linguistics, 2005, 31, 227-248. | 2.5 | 13 |
| 44 | Cyclic consistency: A local reduction operation for binary valued constraints. Artificial Intelligence, 2004, 155, 69-92. | 3.9 | 7 |
| 45 | Arc consistency for soft constraints. Artificial Intelligence, 2004, 154, 199-227. | 3.9 | 80 |
| 46 | A Complete Characterization of Complexity for Boolean Constraint Optimization Problems. Lecture Notes in Computer Science, 2004, , 212-226. | 1.0 | 10 |
| 47 | Identifying Efficiently Solvable Cases of Max CSP. Lecture Notes in Computer Science, 2004, , 152-163. | 1.0 | 3 |
| 48 | Reduction operations in fuzzy or valued constraint satisfaction. Fuzzy Sets and Systems, 2003, 134, 311-342. | 1.6 | 40 |
| 49 | Soft Constraints: Complexity and Multimorphisms. Lecture Notes in Computer Science, 2003, , 244-258. | 1.0 | 12 |
| 50 | The Interpretation of Line Drawings with Contrast Failure and Shadows. International Journal of Computer Vision, 2001, 43, 75-97. | 10.9 | 12 |
| 51 | Linear constraints for the interpretation of line drawings of curved objects. Artificial Intelligence, 2000, 119, 235-258. | 3.9 | 7 |
| 52 | Semantic Distance Measures. Computational Intelligence, 2000, 16, 79-94. | 2.1 | 8 |
| 53 | Linear-time algorithms for testing the realisability of line drawings of curved objects. Artificial Intelligence, 1999, 108, 31-67. | 3.9 | 18 |
| 54 | Constraints, consistency and closure. Artificial Intelligence, 1998, 101, 251-265. | 3.9 | 162 |

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|---|---|---|---|
| 55 | The Tractability of Segmentation and Scene Analysis. International Journal of Computer Vision, 1998, 30, 27-42. | 10.9 | 37 |
| 56 | Interpreting line drawings of curved objects with tangential edges and surfaces. Image and Vision Computing, 1997, 15, 263-276. | 2.7 | 18 |
| 57 | Fundamental properties of neighbourhood substitution in constraint satisfaction problems. Artificial Intelligence, 1997, 90, 1-24. | 3.9 | 27 |
| 58 | Tractable constraints on ordered domains. Artificial Intelligence, 1995, 79, 327-339. | 3.9 | 127 |
| 59 | A substitution operation for constraints. Lecture Notes in Computer Science, 1994, , 1-9. | 1.0 | 5 |
| 60 | Characterising tractable constraints. Artificial Intelligence, 1994, 65, 347-361. | 3.9 | 96 |
| 61 | Interpretation of line drawings of complex objects. Image and Vision Computing, 1993, 11, 82-90. | 2.7 | 19 |
| 62 | Estimating optimal parameters for parallel database hardware. International Journal of Systems Science, 1992, 23, 119-125. | 3.7 | 3 |
| 63 | An optimal k-consistency algorithm. Artificial Intelligence, 1989, 41, 89-95. | 3.9 | 105 |
| 64 | Efficient systematic analysis of occlusion. Pattern Recognition Letters, 1988, 7, 259-264. | 2.6 | 5 |
| 65 | Accelerated analysis of occlusion. Image and Vision Computing, 1988, 6, 3-12. | 2.7 | 1 |
| 66 | The Tractability of CSP Classes Defined by Forbidden Patterns. Journal of Artificial Intelligence Research, 0, 45, 47-78. | 7.0 | 14 |
| 67 | Variable Elimination in Binary CSPs. Journal of Artificial Intelligence Research, 0, 66, 589-624. | 7.0 | 0 |