

References

On-line

NASSLLI 2003 Tutorial lecture notes
R. Barták, <http://ktiml.mff.cuni.cz/~bartak/NASSLLI2003>, 2003.

On-line Guide to Constraint Programming
R. Barták, <http://kti.mff.cuni.cz/~bartak/constraints>, 1998.

Constraints Archive
<http://www.cs.unh.edu/ccc/archive>

Books

Constraint Satisfaction in Logic Programming
P. Van Hentenryck, MIT Press, 1989.

Foundations of Constraint Satisfaction
E. Tsang, Academic Press, 1993.

Programming with Constraints: An Introduction
K. Marriott, P.J. Stuckey, MIT Press, 1998.

Surveys

Constraint Programming: In Pursuit of Holy Grail
R. Barták, in Proceedings of Week of Doctoral Students, Prague, 1999.

Constraint Logic Programming – A Survey
J. Jaffar & M.J. Maher, *J. Logic Programming*, 19/20:503-581, 1996.

Algorithms for Constraint Satisfaction Problems: A Survey
V. Kumar, *AI Magazine* 13(1): 32-44, 1992.

A Tutorial on Constraint Programming
B.M. Smith, TR 95.14, University of Leeds, 1995.

The Origins

The Programming Language Aspects of ThingLab, A Constraint-Oriented Simulation Laboratory
A. Borning, in *ACM Transactions on Programming Languages and Systems* 3(4): 252-387, 1981.

Logic Programming: Further Developments
H. Gallaire, in: *IEEE Symposium on Logic Programming*, Boston, IEEE, 1985.

Constraint Logic Programming
J. Jaffar & J.L. Lassez, in *Proc. The ACM Symposium on Principles of Programming Languages*, ACM, 1987.

Networks of constraints fundamental properties and applications to picture processing
U. Montanary, in: *Information Sciences* 7: 95-132, 1974.

Sketchpad: a man-machine graphical communication system
I. Sutherland, in *Proc. IFIP Spring Joint Computer Conference*, 1963.

Understanding line drawings of scenes with shadows
D.L. Waltz, in *Psychology of Computer Vision*, McGraw-Hill, New York, 1975.

Binarisation

On the conversion between Non-Binary and Binary Constraint Satisfaction Problems
F. Bacchus, P. van Beek, in *Proc. National Conference on Artificial Intelligence (AAAI-98)*, Madison, Wisconsin, 1998.

Non-Binary Constraints
C. Bessiere, in *Proc. Principles and Practice of Constraint Programming (CP-99)*, Alexandria, Virginia, USA, 1999.

On the equivalence of constraint satisfaction problems
F. Rossi, V. Dahr and C. Petrie, in *Proc. European Conference on Artificial Intelligence (ECAI-90)*, Stockholm, 1990. Also MCC Technical Report ACT-AI-222-89.

Using auxiliary variables and implied constraints to model non-binary problems
B. Smith, K. Stergiou, T. Walsh, in *Proc. National Conference on Artificial Intelligence (AAAI-00)*, Austin, Texas, 2000.

Encodings of Non-Binary Constraint Satisfaction Problems
K. Stergiou, T. Walsh, in *Proc. National Conference on Artificial Intelligence (AAAI-99)*, Orlando, Florida, 1999.

Local Search

Tabu Search for Maximal Constraint Satisfaction Problems
P. Galinier, Jin-Kao Hao, in *Proceedings of Principles and Practice of Constraint Programming (CP97)*, Springer Verlag, Austria, 1997.

Tabu Search
F. Glover, M. Laguna, in: *Modern Heuristics for Combinatorial Problems*, Blackwell Scientific Publishing, Oxford, 1993.

Localizer: A Modelling Language for Local Search
L. Michel, P. Van Hentenryck, in *Proceedings of Principles and Practice of Constraint Programming (CP97)*, Springer Verlag, Austria, 1997.

Minimising conflicts: a heuristic repair method for constraint satisfaction and scheduling problems
S. Minton, M.D. Johnston, P. Laird, in: *Artificial Intelligence* 58(1-3):161-206, 1992.

Domain-independent extensions to GSAT: Solving Large Structured Satisfiability Problems
B. Selman, H. Kautz, in: *Proc. IJCAI-93*, 1993.

Solving constraint satisfaction problems using neural-networks
C.J. Wang, E.P.K. Tsang, in: *Proc. Second International Conference on Artificial Neural Networks*, 1991.

Search

Backtracking algorithms for constraint satisfaction problems; a survey
R. Dechter, D. Frost, in *Constraints*, International Journal, 1998.

Performance Measurement and Analysis of Certain Search Algorithms
Gaschnig, J., CMU-CS-79-124, Carnegie-Mellon University, 1979.

Dynamic Backtracking

M.L. Ginsberg, in *Journal of Artificial Intelligence Research* 1, pages 25-46, 1993.

Iterative Broadening

M.L. Ginsberg, W.D. Harvey, In *AAAI Proceedings*, 1990.

Increasing tree search efficiency for constraint satisfaction problems

Haralick, R.M., Elliot, G.L., in: *Artificial Intelligence* 14:263-314, 1980.

Limited Discrepancy Search

W.D. Harvey and M.L. Ginsberg, in *Proceedings of IJCAI95*, pages 607-613, 1995.

Consistency techniques

Improving Domain Filtering using Restricted Path Consistency

P. Berlandier, in *Proceedings of the IEEE CAIA-95*, Los Angeles CA, 1995.

Arc-consistency and arc-consistency again

C. Bessiere, in *Artificial Intelligence* 65, pages 179-190, 1994.

Using constraint metaknowledge to reduce arc consistency computation

C. Bessiere, E.C. Freuder, and J.-R. Régin, in *Artificial Intelligence* 107, pages 125-148, 1999.

Some practicable filtering techniques for the constraint satisfaction problem

R. Debruyne and C. Bessière, in *Proceedings of the 15th IJCAI*, pages 412-417, 1997.

Neighborhood inverse consistency preprocessing

E. Freuder and C. D. Elfe, in *Proceedings of the AAAI National Conference*, pages 202-208, 1996.

Comments on Mohr and Henderson's path consistency algorithm

C. Han and C. Lee, in *Artificial Intelligence* 36, pages 125-130, 1988.

Consistency in networks of relations

A.K. Mackworth, in *Artificial Intelligence* 8, pages 99-118, 1977.

The complexity of some polynomial network consistency algorithms for constraint satisfaction problems

A.K. Mackworth and E.C. Freuder, in *Artificial Intelligence* 25, pages 65-74, 1985.

Arc and path consistency revised

R. Mohr and T.C. Henderson, in *Artificial Intelligence* 28, pages 225-233, 1986.

Arc consistency for factorable relations

M. Perlin, in *Artificial Intelligence* 53, pages 329-342, 1992.

Singleton Consistencies

P. Prosser, K. Stergiou, T. Walsh, in *Proc Principles and Practice of Constraint Programming (CP2000)*, pages 353-368, 2000.

A filtering algorithm for constraints of difference in CSPs

J.C. Régin, in *AAAI-94*, in *Proceedings of the Twelfth National Conference on Artificial Intelligence*, pages 362-367, 1994.

Path Consistency Revised

M. Singh, in *Proceedings of the 7th IEEE International Conference on Tools with Artificial Intelligence*, pages 318-325, 1995.

A generic customizable framework for inverse local consistency

G. Verfaillie, D. Martinez, and C. Bessiere, in *Proceedings of the AAAI National Conference*, pages 169-174, 1999.

A generic arc-consistency algorithm and its specializations

P. Van Hentenryck, Y. Deville, and C.-M. Teng, in *Artificial Intelligence* 57, pages 291-321, 1992.

Over-constrained problems

Modelling Soft Constraints: A Survey

Barták, R., *Neural Network World*, Vol. 12, Number 5, pp. 421-431, 2002.

Semiring-based Constraint Satisfaction and Optimisation

S. Bistarelli, U. Montanary, F. Rossi, *Journal of ACM*, 1997.

Semiring-based CSPs and Valued CSPs: Frameworks, properties, and comparison

S. Bistarelli, H. Fargier, U. Montanary, F. Rossi, T. Schiex, G. Verfaillie, *Constraints: An international journal*, 4(3), 1999.

Constraint Hierarchies

A. Borning, R. Duisberg, B. Freeman-Benson, A. Kramer, M. Woolf, in *Proceedings of the 1987 ACM Conference on Object Oriented Programming Systems, Languages, and Applications*, pp.48-60, 1987.

Propagation and satisfaction of flexible constraints

D. Dubois, H. Fargier, H. Prade, in *Fuzzy Sets, Neural Networks and Soft Computing*, pp. 166-187, New York, 1994.

Uncertainty in constraint satisfaction problems: a probabilistic approach

H. Fargier, J. Lang, in *Proceedings of European Conference on Symbolic and Quantitative Approaches to Reasoning and Uncertainty*, Springer Verlag LNCS 747, 1993.

Selecting preferred solutions in fuzzy constraint satisfaction problems

H. Fargier, J. Lang, T. Schiex, in the *First European Congress on Fuzzy and Intelligent Technologies*, Volume 3, pp. 1128-1134, 1993.

Partial Constraint Satisfaction

E.C. Freuder, R.J. Wallace, *Artificial Intelligence*, 58:21-70, 1992.

Constraint Satisfaction with Preferences

H. Rudová, Ph.D. Thesis, Masaryk University, Brno, 2001.

Possibilistic constraint satisfaction problems or "How to handle soft constraints?"

T. Schiex, in *Proceedings of the Eighth International Conference on Uncertainty in Artificial Intelligence*, pp. 268-275, Stanford, 1992.

Valued Constraint Satisfaction Problems: Hard and Easy Problems

T. Schiex, H. Fargier, G. Verfaillie, in *Proceedings of the Fourteenth International Joint Conference on Artificial Intelligence*, pp. 631-639, San Mateo, 1995.