

## **Boi Volkert Faltings**

Swiss Federal Institute of Technology, Lausanne (EPFL)  
School of Computer and Communication Sciences  
IN-Ecublens, 1015 Lausanne, Switzerland

home: Ave. de Croix de Rive 20, 1028 Prévèrenge, Switzerland

Born April 10th, 1960, in Gelsenkirchen, W. Germany

### **Chronological Bibliography:**

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|-----------------|--|
| 1978-83         | Studied Electrical Engineering at the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland. Obtained Diploma with distinction. Won Silver Medal of ETH and an industrial prize for the diploma thesis.                                       |
| 1983-87         | Graduate studies at the University of Illinois, Urbana, USA. Obtained Ph. D. with a dissertation on "Qualitative Kinematics in Mechanisms," advisor: Ken Forbus  |
| Oct.1987-1993   | Professeur extraordinaire of Artificial Intelligence at the Department of Computer Science of the Swiss Federal Institute of Technology, Lausanne (EPFL). Founded Artificial Intelligence Laboratory, which currently (2007) employs about 20 researchers. |
| 1993-present    | Professeur ordinaire (full professor) of Artificial Intelligence at EPFL. Research in case-based reasoning, constraint satisfaction, and multi-agent systems. Courses on Artificial Intelligence and Intelligent Agents at EPFL.                           |
| Feb.-April 1996 | Visiting researcher at the NEC Research Institute, Princeton (USA).  |
| 1996-1998       | Head of computer science department at EPFL.   |
| 2000-2001       | Chief Scientist, Iconomic Systems SA   |
| Jan.-June 2001  | Visiting professor, Computer Science Department, Stanford University   |
| 2001-2002       | Chief Scientist (20%), i:FAO AG, Frankfurt   |
| 2004-2008       | Head of Institute of Core Computing Science, EPFL  |

### **Honors:**

Silver Medal of the ETH Zürich, 1983  
IBM Graduate Fellow, 1984-86  
IFIP Distinguished Service Award, 2000  
Fellow, European Coordinating Committee on Artificial Intelligence (ECCAI), 2002

### **Languages:**

Fluent in German (native), English and French, some knowledge of Japanese and Chinese

## ACTIVITIES

Program Co-Chair, 8th International Conference on Web Intelligence and Intelligent Agent Technology, October 2008

Workshop co-chair, European Conference on Artificial Intelligence, 2008

Executive Committee, Nano-tera.ch, from December 2007

Organizer, ECAI workshop on Distributed Constraint Reasoning, 2006

Program Co-Chair and Organizer, CSCLP04, Lausanne, June 2004

Program Co-Chair, 3rd International Conference on Web Intelligence and Intelligent Agent Technology, October 2003

Program Chair, Second Conference on Prestigious Applications of Artificial Intelligence, July 2002

Program Chair, 7th International Symposium on AI and Mathematics, January 2002

Track Program Chair, IFIP Conference on Intelligent Information Systems, Beijing, August 2000

Organizer, postgraduate course series on Intelligent Agents, EPFL, February-October 1999

Tutorial chair, International Joint Conference on Artificial Intelligence, 1999

Head of EPFL Computer Science department, 1996 - 1998

Member of the EPFL research commission, 1989 - 1994

Co-chair, 3rd European Workshop on Case-based Reasoning, Lausanne, November 1996

Co-chair, AAAI Fall Symposium on Configuration, Cambridge, November 1996

Vice-President, Swiss Group for AI and Cognitive Science (SGAICO), 1989 — 1996 President, Swiss Group for AI and Cognitive Science (SGAICO), 1996 — present

Co-chair and local organizer, 3rd International Conference on Artificial Intelligence in Design, Lausanne, August 1994

Organizer of two technology transfer symposia on Artificial Intelligence (EPFL, April 1994) and Configuration Systems (Bern, December 1998)

Organizer, Workshop on “Artificial Intelligence in Design,” International Joint Conference on Artificial Intelligence, Chambéry, August 1993

Co-chairman, 4th International Workshop on Qualitative Physics, Lugano, July 9-12, 1990

Consultant for

- SYSECA, Paris
- IIIA (Institut International de l’Intelligence Artificielle), Compiègne (France)

- Landis & Gyr, Zug, Switzerland
- ESEC SA, Cham, Switzerland
- Bank Vontobel, Zurich, Switzerland
- i:FAO, Frankfurt, Germany
- Alstom, Baden, Switzerland
- SGFI, Gingins, Switzerland

Proposal evaluation for

- National Science Foundation (USA)
- National Science Foundation (Ireland)
- Israel Science Foundation
- Swiss National Science Foundation
- Swedish government
- Dutch government
- Austrian government

Journal Editorial Boards:

- Artificial Intelligence Journal (Associate Editor)
- Journal of AI Research (Associate Editor, Advisory Board)
- Web Intelligence and Agent Systems (Associate Editor)
- Annals of AI and Mathematics (Associate Editor)
- CONSTRAINTS
- AI Communications
- Artificial Intelligence in Engineering Design, Analysis and Manufacturing (AI EDAM)

Major Conference Committees:

- European Conferences on Artificial Intelligence, 1992, 1994, 1996, 1998, 2000, 2004, 2006, 2008
- National Conference of the AAAI, 1996, 1998, 2000, 2002, 2003, 2004, 2006, 2007, 2008
- International Joint Conference on Artificial Intelligence, 1993 (advisory board), 1997, 1999, 2005, 2007, 2009
- 1st - 10th Conference on Principles and Practice of Constraint Programming (CP), 1996, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007

- 1st - 7th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS), 2002,2003,2004,2005,2006,2007,2008,2009
- 1st-7th European Workshops on Case-Based Reasoning, 1993,1994,1996,1998,2000,2002,2004,2006
- 1st - 5th International Conference on Case-based Reasoning, 1997,1999, 2001,2003,2005

## Ph.D. Theses supervised:

- Mounir Maouene:  
*Modelisation de l'image mentale et son role dans la comprehension du texte*,  
EPFL Thesis No. 1055, 1992  
current position: unknown
- Kefeng Hua:  
*Case-Based Design of Geometric Structures*,  
EPFL Thesis No. 1270, 1994  
current position: Price Waterhouse, Menlo Park
- Kun Sun:  
*Computer-Aided Creative Mechanism Design*,  
EPFL Thesis No. 1271, 1994  
current position: Credit Suisse, Zurich
- Berthe Choueiry:  
*Abstraction Methods for Resource Allocation*,  
EPFL Thesis No. 1292, 1994  
*Fritz Kutter Prize for best Computer Science Thesis in Switzerland, given at ETH Zurich, 1995*  
current position: associate professor, University of Nebraska
- Jamila Sam:  
*Constraint Consistency Techniques for Continuous Domains*,  
EPFL Thesis No. 1423, 1995  
current position: teaching associate, EPFL
- Beat Liver:  
*A Functional Model of Software and its Application in Troubleshooting, Design and Reuse*,  
EPFL Thesis No. 1519, 1996  
current position: Credit Suisse, Zurich
- Monika Lundell:  
*Qualitative Modelling and Simulation of Spatially Distributed Parameter Systems*,  
EPFL Thesis No. 1522, 1996  
current position: teaching associate, EPFL
- Eric Sauthier:  
*Model Based Supervisory Control using Empirical Knowledge*,  
EPFL Thesis No. 1560, 1996  
current position: Siemens
- Rainer WEIGEL:  
*Dynamic Abstractions and Reformulations in Constraint Satisfaction Problems*  
EPFL Thesis No. 1825, 1998  
current position: professor, HES St. Gallen

- Esther GELLE:  
*On the Generation of Locally Consistent Solution Spaces in Mixed Dynamic Constraint Problems*,  
EPFL Thesis No. 1826, 1998  
current position: section head, ABB research
- Roberto BOLOGNESI:  
*Modèle de métaraisonnement*  
EPFL Thesis No. 1959, 1999  
current position: entrepreneur
- Anton MARGELISCH:  
*Eine Modellierungssprache für ein wissensbasiertes System zur computerunterstützten Geschäftsfallbearbeitung in Dienstleistungsunternehmen*  
EPFL Thesis No. 2054, 1999  
current position: unknown
- Claudio LOTTAZ:  
*Collaborative Design using Solution Spaces*  
EPFL Thesis No. 2119, 2000  
current position: postdoc, Bioinformatics institute, Uni. Berlin
- Christian FREI:  
*Abstraction Techniques for Resource Allocation in Communication Networks*  
EPFL Thesis No. 2144, 2000  
ECCAI Award for best European AI Thesis in 2000  
current position: ABB research labs.
- Steven WILLMOTT:  
*Coordination Structures for the Intelligent Control of Dynamic Distributed Systems*  
EPFL Thesis No. 2478, 2002  
current position: Founder and CTO, 3scale Networks, Barcelona
- Monique CALISTI:  
*Coordination and Negotiation for Solving Multi-Provider Service Provisioning*  
EPFL Thesis No. 2492, 2002  
current position: Vice President for Research, Whitestein Technologies
- Marius SILAGHI  
*Asynchronously Solving Distributed Problems with Privacy Requirements*  
EPFL Thesis No. 2601, 2002  
current position: associate professor, Florida Institute of Technology
- Marc TORRENS  
*Scaleable Intelligent Electronic Catalogs*  
EPFL Thesis No. 2690, 2002  
current position: co-founder and Chief Innovation Officer, Strands, Corvallis and Barcelona
- Carlos EISENBERG  
*Distributed Constraint Satisfaction for Coordinating and Integrating a Large-Scale, Heterogeneous Enterprise*

EPFL Thesis No. 2817, 2003

current position: Founder and CEO of Synctec PTE, Singapore

- Nicoleta NEAGU

*Interchangeability in Constraint Satisfaction Problems*

EPFL Thesis No. 2910, 2004

current position: scientist, Air Liquide Research Center, Paris

- Santiago MACHO-GONZALEZ

*Integrating Problem Solving and Information Gathering using Constraint Satisfaction*

EPFL Thesis No. 2963 (2004)

current position: Postdoc, IIIA Institute, Bellaterra (Spain)

- Ion CONSTANTINESCU

*Service Discovery, Composition and Execution for Large Scale Open Environments*

EPFL Thesis 3371 (2005)

current position: Founder and CEO of Service2service.net (USA)

- Paolo VIAPPIANI

*Preference-based Search with Suggestions*

EPFL Thesis 3876 (2007)

current position: Postdoc, University of Toronto

- Vincent SCHICKEL-ZUBER

*Ontology Filtering*

EPFL Thesis 3934 (2007)

Chorafas 2008 Award

current position: Founder, Prediggo

- Adrian PETCU

*A Class of Algorithms for Distributed Constraint Optimization*

EPFL Thesis 3942 (2007)

ECCAI 2007 award for the best AI thesis in Europe

current position: Researcher, SAP Labs

- Radu JURCA

*Truthful Reputation Mechanisms for Online Systems*

EPFL Thesis 3955 (2007)

Victor Lesser Award 2007

current position: Researcher, Google

- Quang-Huy NGUYEN

*Local Search Techniques for Multi-Agent Constraint Optimization Problems*

EPFL Thesis 4074 (2008) current position: Traffic Optimization software developer

### **Current Ph.D. Students:**

- Thomas Leauté  
since: September 2006  
tentative title: *Online Distributed Constraint Optimization under Uncertainty*
- Brammert Ottens  
since: October 2007  
tentative title: *Autonomy in Cooperation*
- Florent Garcin  
since: September 2008
- Li Pu  
since: September 2008

## PUBLICATIONS

### Books and Dissertations

B. Faltings, A. Petcu, F. Fages and F. Rossi: "*Recent Advances in Constraints*," Lecture Notes in Computer Science 3419, 2004

B. Faltings and I. Smith: "*Advances in Case-Based Reasoning*," Lecture Notes in Computer Science 1168, Springer Verlag, November 1996

B. Faltings and P. Struss, Editors, "*Recent Advances in Qualitative Physics*," MIT Press, October 1992

B. Faltings, "*Qualitative Kinematics in Mechanisms*", Ph. D. Dissertation, University of Illinois, 1987

### Journal Articles

A. Petcu, B. Faltings and D. Parkes: "*M-DPOP: Faithful Distributed Implementation of Efficient Social Choice Problems*," Journal of Artificial Intelligence Research (JAIR), 32, 2008, pp. 705-755.

X.-H. Vu, D. Sam-Haroud and B. Faltings: "*Enhancing Numerical Constraint Propagation using Multiple Inclusion Representations*," Annals of Mathematics and Artificial Intelligence (to appear), 2008.

R. Jurca and B. Faltings: "*Truthful Opinions from the Crowds*," ACM SIGEcom Exchanges, 7(2), June, 2008.

P. Viappiani, P. Pu and B. Faltings: "*Preference-based search with adaptive recommendations*," AI Communications, 21(2-3), April, 2008, pp. 155-175.

R. Jurca and B. Faltings: "*Obtaining Reliable Feedback for Sanctioning Reputation Mechanisms*," Journal of Artificial Intelligence Research (JAIR), 29, 2007, pp. 391-419.

P. Viappiani, B. Faltings and P. Pu: "*Preference-based Search using Example-Critiquing with Suggestions*," Journal of Artificial Intelligence Research (JAIR), 27, 2006, pp. 465-503.

C. Frei, B. Faltings and M. Hamdi: "*Resource Allocation in Communication Networks Using Abstraction and Constraint Satisfaction*," IEEE Journal on Selected Areas in Communications 23(2), pp. 304-320, 2005

B. Faltings and S. Macho-Gonzalez: "*Open Constraint Programming*," Artificial Intelligence 161(1-2), pp. 181-208, January 2005

M.C. Silaghi and B. Faltings: "*Asynchronous Aggregation and Consistency in Distributed Constraint Satisfaction*," Artificial Intelligence 161(1-2), pp. 25-54, January 2005

B. Faltings and M. Yokoo: "*Introduction: Special Issue on Distributed Constraint Satisfaction*," Artificial Intelligence 161(1-2), pp. 1-6, January 2005

P. Pu and B. Faltings: "*Decision Tradeoff using Example-Critiquing and Constraint Pro-*

- gramming,” *Constraints* **9**(4), December, 2004, pp. 289-310.
- B. Faltings, M. Torrens and P. Pu: “*Solution Generation with Qualitative Models of Preferences*,” *Computational Intelligence* **20**(2), May, 2004, pp. 246-263
- Esther Gelle and Boi Faltings: “*Solving Mixed and Conditional Constraint Satisfaction Problems*”, *CONSTRAINTS* **8**(2), April 2003, pp. 107-141
- Marc Torrens, Boi Faltings and Pearl Pu: “*Smart Clients: Constraint Satisfaction as a Paradigm for Scalable Intelligent Information Systems*”, *CONSTRAINTS* **7**(1), 2002, pp. 49-69
- Monique Calisti and Boi Faltings: “*Agent-Based Negotiations for Multi-Provider Interactions*”, *Journal of Autonomous Agents and Multi-Agent Systems*, JAAMAS, 2001
- Monique Calisti and Boi Faltings: “*Distributed constrained agents for allocating service demands in multi-provider networks*”, *Journal of the Italian Operational Research Society*, Special Issue on Constraint-Based Problem Solving Vol XXIX No 91, 2000
- Christian Frei and Boi Faltings , “*Bandwidth Allocation Planning in Communication Networks*”, *ICON Journal*, Special Issue on Multimedia Network and Service Control. Baltzer Science Publisher, 2000.
- R. Weigel, B. Faltings, ” *Compiling constraint satisfaction problems*”, *Artificial Intelligence* **115** (1999), pp. 257-287
- Cl. Lottaz, D. Clement, B. Faltings, I. Smith, ” *Constraint-Based Support for Collaboration in Design and Construction*”, *Journal of Computing in Civil Engineering*, pp 1-12, Vol. 13 No. 1, January 1999
- B. Faltings, E. Freuder, “*Guest Editor’s Introduction: Configuration*”, *IEEE Expert - Intelligent Systems and their Applications* **13**(1997), pp. 32-33
- Boi Faltings, ” *Qualitative Models as Indices for Memory-Based Prediction*,” *IEEE Expert - Intelligent Systems and their Applications* **12**(1997), pp. 47-53
- Boi Faltings, ” *Research at the Laboratoire d’Intelligence Artificielle, EPFL*,” *Revue d’Intelligence Artificielle* **11**(1997), pp. 11-26
- Boi Faltings, “*Learning to cope with an open world*,” *Artificial Intelligence for Engineering Design, Analysis and Manufacturing (AI EDAM)*, **10** (1996), pp. 143-145
- D. Sam-Haroud, B. Faltings, ” *Consistency Techniques for Continuous Constraints*”, *CONSTRAINTS* **1**(1), Kluwer Academic Publishers, 1996, pp. 85-118
- Boi Faltings, Kun Sun, “*FAMING: supporting innovative mechanism shape design*,” *Computer-Aided Design* **28** (1996), pp. 207-216
- Kefeng Hua, Boi Faltings, Ian Smith, “*CADRE: case-based geometric design*,” *Artificial Intelligence in Engineering* **10**, pp. 171-183, 1996
- Boi Faltings, “*Working group in model-based design and reasoning. Part I: modeling and*

*diagnosis*,” AI Communications **9** (1996), pp. 59-64

Boi Faltings, “*Working group in model-based design and reasoning. Part II: design*,” AI Communications **9** (1996), pp. 65-73

G. Schmitt, M. Engeli, D. Kurmann, B. Faltings, S. Monnier, “*Multi-agent interaction in a complex virtual environment*,” AI Communications **9** (1996), pp. 74-78

B. Faltings, “*Arc-consistency for continuous variables*,” *Artificial Intelligence* **65**, 1994

B. Faltings, P. Pu: “*Imagery for Open-World Spatial Problems*,” *Computational Intelligence* **9**(4), 1993

F. Fekih-Ahmed, B. Faltings, C. Bachmann, “*A diagnostic assistant in clinical chemistry*,” *Chemometrics and Intelligent Laboratory Systems: Laboratory Information Management* **21**(1993), pp. 267-273

K. Hua, B. Faltings, “*Exploring Case-Based Building Design-CADRE*,” *Artificial Intelligence in Engineering Design, Analysis and Manufacturing (AI EDAM)*, 1993

B. Faltings, “*A Symbolic Approach to Qualitative Kinematics*,” *Artificial Intelligence* **56**(2), 1992

B. Faltings, E. Sauthier, “*Model-based Traffic Control*,” *International Journal of Artificial Intelligence in Engineering* **7**, 1992

B. Faltings, “*Mechanical Engineering is more than Differential Equations*,” *Computational Intelligence* **8**(2), pp. 319-322, 1992

K. Forbus, P. Nielsen, B. Faltings, “*Qualitative Spatial Reasoning: The CLOCK Project*,” *Artificial Intelligence* **51**(3), pp.417-471, 1991

B. Faltings and I. Smith, “*Conception assistée par ordinateur intelligent: Vers de nouveaux outils de communication*,” *Marché Suisse des Machines*, 8 avril 1991, pp. 36-43 (in French)

B. Faltings, “*Qualitative Kinematics in Mechanisms*,” *Artificial Intelligence* **44**(1), June 1990

B. Faltings, “*Wissensrepräsentation und Qualitative Schliessen*,” *Informationstechnik* **it** **31**(2), 1989 (in German)

### **Refereed Articles**

A. Kumar, A. Petcu and B. Faltings: “*H-DPOP: Using Hard Constraints to Prune the Search Space*,” *Twenty Third International Conference on Artificial Intelligence (AAAI-08)*, Chicago, IL, USA, July, 2008.

R. Jurca and B. Faltings: “*Incentives for Expressing Opinions in Online Polls*,” *Proceedings of the 2008 ACM Conference on Electronic Commerce*, July, 2008, pp. 119-128.

A. Petcu and B. Faltings: “*R-DPOP: Optimal Solution Stability in Continuous-Time Optimization*,” *IAT 2007 - International Conference on Intelligent Agent Technology*, Fremont, CA, USA, Nov, 2007.

- A. Petcu and B. Faltings: "LS-DPOP: A Hybrid of Inference and Local Search for Distributed Combinatorial Optimization," IAT 2007 - International Conference on Intelligent Agent Technology, Fremont, CA, USA, Nov, 2007.
- P. Viappiani, P. Pu and B. Faltings: "Conversational Recommenders with Adaptive Suggestions," Recommender Systems 2007, Minneapolis, Minnesota, USA, October, 2007.
- P. Viappiani and B. Faltings: "Preference-based search for Configurable Catalogs," AAAI 2007 Workshop on Configuration, Vancouver, July, 2007.
- M. Schumacher, T. van Pelt, I. Constantinescu, A. de Oliveira e Sousa and B. Faltings: "WSDir: a Federated Directory System of Semantic Web Services," Proceedings of the 16th IEEE International Workshops on Enabling Technologies: Infrastructures for Collaborative Enterprises (WETICE 2007), June, 2007.
- M. Schumacher, T. van Pelt, I. Constantinescu, A. de Oliveira e Sousa and B. Faltings: "Discovering Semantic Web Services in Federated Directories," Proceedings of the 9th International Conference on Enterprise Information Systems (ICEIS'07), June, 2007.
- D. Bianculli, R. Jurca, W. Binder, C. Ghezzi and B. Faltings: "Automated Dynamic Maintenance of Composite Services Based on Service Reputation," Fifth International Conference on Service-Oriented Computing (ICSOC-2007), Lecture Notes in Computer Science (LNCS), 4749, pp. 449-455, 2007
- R. Jurca and B. Faltings: "Collusion Resistant, Incentive Compatible Feedback Payments," Proceedings of the ACM Conference on Electronic Commerce (EC'07), 2007, pp. 200-209.
- A. Talwar, R. Jurca and B. Faltings: "Understanding User Behavior in Online Feedback Reporting," Proceedings of the ACM Conference on Electronic Commerce (EC'07), 2007, pp. 134-142.
- R. Jurca, W. Binder and B. Faltings: "Reliable QoS Monitoring Based on Client Feedback," Proceedings of the 16th International World Wide Web Conference (WWW07), Banff, Canada, May 8-12, 2007, pp. 1003-1011.
- M. Schumacher, T. van Pelt, I. Constantinescu, A. de Oliveira e Sousa and B. Faltings: "Federated Directories of Semantic Web Services," Proceedings of the 21st ACM Symposium on Applied Computing, March, 2007.
- A. Petcu and B. Faltings: "MB-DPOP: A New Memory-Bounded Algorithm for Distributed Optimization," Proceedings of the 20th International Joint Conference on Artificial Intelligence, IJCAI-07, Hyderabad, India, Jan, 2007, pp. 1452-1457.
- A. Petcu, B. Faltings and R. Mailler: "PC-DPOP: A New Partial Centralization Algorithm for Distributed Optimization," Proceedings of the 20th International Joint Conference on Artificial Intelligence, IJCAI-07, Hyderabad, India, Jan, 2007, pp. 167-172.
- V. Schickel-Zuber and B. Faltings: "OSS: A semantic Similarity Function based on Hierarchical Ontologies," Proceedings of the 20th International Joint Conference on Artificial Intelligence, IJCAI-07, 2007, pp. 551-556.
- A. Kumar, A. Petcu and B. Faltings: "H-DPOP: Using Hard Constraints to Prune the Search

*Space*,” IJCAI’07 - Distributed Constraint Reasoning workshop, DCR’07, Jan, 2007.

B. Faltings, D. Parkes, A. Petcu and J. Shneidman: ”*Optimizing Streaming Applications with Self-Interested Users using MDPOP*,” COMSOC’06: International Workshop on Computational Social Choice , Amsterdam, The Netherlands, December, 2006.

A. Petcu and B. Faltings: ”*PC-DPOP: A New Partial Centralization Algorithm for Distributed Optimization*,” ECAI’06 DCSP Workshop on Distributed Constraint Satisfaction Problems, Riva del Garda, Italy, August, 2006.

V. Schickel-Zuber and B. Faltings: ”*Using an Ontological A-priori Score To Infer User’s Preferences*,” In Workshop on Recommender Systems - ECAI06, 2006, pp. 102-106.

P. Viappiani and B. Faltings: ”*Adaptive Suggestions for Example based Tools*,” ECAI 06 Multidisciplinary Workshop on Advances in Preference Handling, Riva del Garda, Italy, August, 2006, pp. 134-140.

B. Faltings and Q. H. Nguyen: ”*Random Subset Optimization*,” Proceedings of the 17th European Conference on Artificial Intelligence (ECAI’06), August, 2006, pp. 88-92.

P. Viappiani and B. Faltings: ”*Implementing Example-based Tools for Preference-based Search*,” The Sixth International Conference on Web Engineering (ICWE 06), Menlo Park, California, USA, July, 2006, pp. 89-90.

A. Petcu and B. Faltings: ”*O-DPOP: An algorithm for Open/Distributed Constraint Optimization*,” Proceedings of the National Conference on Artificial Intelligence, AAAI-06, Boston, USA, July, 2006, pp. 703-708.

P. Viappiani, B. Faltings and P. Pu: ”*Evaluating Preference-based Search Tools: a Tale of Two Approaches*,” Proceedings of the Twenty-first National Conference on Artificial Intelligence (AAAI-06), Boston, MA, USA, July, 2006, pp. 205-211.

V. Schickel-Zuber and B. Faltings: ”*Inferring User’s Preferences using Ontologies*,” Proceedings of the Twenty-first National Conference on Artificial Intelligence (AAAI-06), 2006, pp. 1413-1416.

P. Viappiani, B. Faltings and P. Pu: ”*The Lookahead Principle for Preference Elicitation: Experimental Results*,” Seventh International Conference on Flexible Query Answering Systems (FQAS), Milan, Italy, June, 2006, pp. 378-389.

R. Jurca and B. Faltings: ”*Minimum Payments that Reward Honest Reputation Feedback*,” Proceedings of the ACM Conference on Electronic Commerce, Ann Arbor, Michigan, USA, June 11-15, 2006, pp. 190-199.

A. Petcu, B. Faltings and D. Parkes: ”*M-DPOP: Faithful Distributed Implementation of Efficient Social Choice Problems*” AAMAS’06 - Autonomous Agents and Multiagent Systems, Hakodate, Japan, May, 2006, pp. 1397-1404.

R. Jurca and B. Faltings: ”*Using CHI-Scores to Reward Honest Feedback from Repeated Interactions*,” Proceedings of AAMAS06, Hakodate, Japan, May 8 - 12, 2006, pp. 1233-1240.

P. Pu, P. Viappiani and B. Faltings: ”*Increasing User Decision Accuracy using Suggestions*,”

ACM Conference on Human factors in computing systems (CHI06), Montreal, Canada, April, 2006, pp. 121-130.

A. Petcu and B. Faltings: "*Distributed Generator Maintenance Scheduling*," Proceedings of the First International ICSC Symposium on ARTIFICIAL INTELLIGENCE IN ENERGY SYSTEMS AND POWER: AIESP'06, Madeira, Portugal, Feb, 2006.

M.-C. Silaghi, B. Faltings and A. Petcu: "*Secure Combinatorial Optimization simulating DFS tree-based Variable Elimination*," 9th Symposium on Artificial Intelligence and Mathematics, Ft. Lauderdale, Florida, USA, Jan, 2006.

B. Faltings, P. Pu and J. Zhang: "*Agile Preference Models based on Soft Constraints*," Challenges to Decision Support in a Changing World, AAAI Spring Symposium, 2005

N. Neagu and B. Faltings: "*Approximating Partial Interchangeability in CSP Solutions*," Proceedings of the 18th Florida AI Research Symposium, pp. 175-181, 2005

A. Petcu and B. Faltings: "*Superstabilizing, Fault-containing Multiagent Combinatorial Optimization*," Proceedings of the 20th National Conference on Artificial Intelligence (AAAI-05), pp. 449-454, 2005

I. Constantinescu, W. Binder and B. Faltings: "*Selection and Ranking of Propositional Formulas for Large-Scale Service Directories*," 20th National Conference on Artificial Intelligence (AAAI 2005), pp. 1406-1411, 2005

I. Constantinescu, W. Binder and B. Faltings: "*Flexible and Efficient Matchmaking and Ranking in Service Directories*," 2005 IEEE International Conference on Web Services (ICWS 2005), pp. 5-12, 2005 Best student paper award

A. Petcu and B. Faltings: "*An Efficient Constraint Optimization Method for Large Multiagent Systems*," AAMAS 05 - LSMAS workshop (Large Scale Multi-Agent Systems), 2005

R. Jurca and B. Faltings: "*Eliminating Undesired Equilibrium Points from Incentive Compatible Reputation Mechanisms*," Proceedings of the Seventh International Workshop on Agent Mediated Electronic Commerce (AMEC VII), 2005

B. Faltings and Q. H. Nguyen: "*Multi-agent Coordination using Local Search*," Proceedings of the 19th International Joint Conference on Artificial Intelligence (IJCAI-05) pp. 953-958, 2005

A. Petcu and B. Faltings: "*A Scalable Method for Multiagent Constraint Optimization*," Proceedings of the 19th International Joint Conference on Artificial Intelligence (IJCAI-05) pp. 266-271, 2005

A. Petcu and B. Faltings: "*Optimal Solution Stability in Continuous-Time Optimization*" IJCAI 2005 - DCR Workshop (Distributed Constraint Reasoning), 2005

P. Viappiani, B. Faltings, V. Schickel-Zuber and P. Pu: "*Stimulating Preference Expression Using Suggestions*," IJCAI-05 Multidisciplinary Workshop on Advances in Preference, pp. 186-191, 2005

V. Schickel-Zuber and B. Faltings: "*Heterogeneous Attribute Utility Model*," WebKDD 2005,

pp. 80-91, 2005

R. Jurca and B. Faltings: "*Reputation-based Pricing of P2P Services*," Proceedings of the Workshop on Economics of P2P Systems, 2005

W. Binder, I. Constantinescu, B. Faltings and N. Heterd: "*Optimal Workflow Execution in Grid Environments*," 2nd International Conference on Grid Service Engineering and Management (GSEM 2005), LNI P-69, pp. 276-295, 2005

A. Petcu and B. Faltings: "*A Propagation/Local Search Hybrid for Distributed Optimization*," Proceedings of Second International Workshop on Local Search Techniques in Constraint Satisfaction LSCS-05, 2005

B. Faltings and Q. H. Nguyen: "*Random Subset Optimization*," Proceedings of Second International Workshop on Local Search Techniques in Constraint Satisfaction LSCS-05, pp. 32-45, 2005

P. Viappiani, B. Faltings, V. Schickel-Zuber and P. Pu: "*Stimulating Preference Expression Using Suggestions*," Mixed-Initiative Problem-Solving Assistants, AAAI Fall Symposium Series FSS07-05, pp. 128-133, 2005

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## INVITED PRESENTATIONS

### 2007

"Distributed Social Choice," Invited Presentation at MFI-07 ("Modles Formels de l'Interaction"), Paris, May 31st, 2007

### 2006

"Budget-balance in Social Choice," Keynote presentation at the 1st International Workshop on Computational Social Choice, Amsterdam, Dec. 8th, 2006

### 2004

"Incentive-compatible Social Choice," Keynote presentation at the 2004 IEEE/ACM International Conference on Web Intelligence, Beijing, Sept. 22nd, 2004

"Distributed Constraint Satisfaction," Invited presentation at the 3rd International Workshop on Parallel and Distributed Model Checking (PDMC 2004), London, Sept. 4th, 2004

“How to write a review” Principles and Practice of Constraint Programming (CP04), Doctoral Program, Sept. 27th, 2004  
and  
Starting AI Researchers Symposium (ECAI 2004), Valencia, August 23rd, 2004

**2000**

“Making Agents Intelligent,” Invited talk at the 2nd International Symposium on Agent Systems and Applications, Zurich, Sept. 14th, 2000

**1999**

“Case Adaptation: New Perspectives for Case-based Reasoning,” Invited presentation at the 3rd International Conference on Case-Based Reasoning (ICCBR '99), Munich, July 27-30, 1999