

Boi Volkert Faltings

Swiss Federal Institute of Technology, Lausanne (EPFL)
 School of Computer and Communication Sciences
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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 employed up to 25 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 |
| 2004-2009 | Head of Institute of Core Computing Science, EPFL |
| Jan.-June 2010 | Visiting professor, The Hong Kong University of Science and Technology |

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
 Fellow, Association for the Advancement of Artificial Intelligence (AAAI), 2012

Major Research Achievements (together with Ph.D. students):

- developed the first theory for reasoning about kinematic interactions based on shape descriptions, useful for analyzing mechanism function and designing new mechanisms (1985-1996).
- pioneered the use of abstractions for resource allocation and for network routing (1995-2003).
- distributed constraint reasoning: developed the most efficient known algorithm for distributed constraint optimization (DPOP), developed the first practical algorithm with strong privacy guarantees (2000-2011).
- preference-based search/recommender systems: together with Pearl Pu, developed the example-critiquing approach to preference elicitation and preference-based search (1999-2007).
- reputation systems: developed the first technique for making honest reporting the highest-paying equilibrium in feedback systems and opinion polls (2003-2009).
- mechanisms for information elicitation: developed the peer truth serum, a mechanism to incentivize effort and truthfulness in crowdsourcing (2010-2015).

Activities

- graduated 32 Ph.D. students.
- program chair/co-chair for 14 international conferences and workshops.
- program committee member at major AI conferences including IJCAI (7 times), AAAI (16 times), ECAI (9 times).
- editorial board member and associate editor for major journals, including the Journal of AI Research and the AI Journal.
- proposal evaluation for funding bodies in Austria, Ireland, Israel, Netherlands, Sweden, Switzerland and USA.
- consulting for companies and public institutions in Switzerland and European countries.

Technology Transfer

I co-founded the following companies:

- Iconomic Systems SA, 1997
- NexThink SA, 2004
- Fairnez, Inc., 2004
- Prediggo SA, 2008

and I advised these companies at their founding:

- Strands (Barcelona and Corvallis), 2003
- SyncTec (Singapore), 2003