Roger Wattenhofer

1. Major Achievements

Roger Wattenhofer's research interests are the fundamental problems in computer science and information technology that impact the real world, currently in particular machine learning (mainly graph neural networks, but also algorithm learning, disentanglement, and natural language processing), distributed system (fault-tolerance, blockchains, consensus, cryptocurrencies, digital money, cbdc, decentralized finance), theory of networks (financial networks, e-democracy, voting, social networks, online analysis with delay, theory of distributed algorithms). He publishes in different communities: distributed computing (e.g., PODC, SPAA, DISC), networking and systems (e.g., SIGCOMM, MobiCom, SenSys, OSDI), and algorithmic theory (e.g., STOC, FOCS, SODA, ICALP), and learning (e.g. NeurIPS, ICLR, ICML, ACL, AAAI). His work received multiple awards, e.g., the Prize for Innovation in Distributed Computing for his work in Distributed Approximation. He published the book "Blockchain Science: Distributed Ledger Technology", which has been translated to Chinese, Korean and Vietnamese. Many of his research findings have been discussed in the media.

https://disco.ethz.ch/members/wroger/bio.php (full CV with additional information)
https://scholar.google.ch/citations?user=EG3VPm4AAAAJ (more than 35k citations, h-index 91)
http://dblp.uni-trier.de/pers/hd/w/Wattenhofer:Roger (more than 450 independent publications)

2. Education

Studies and Doctorate at ETH Zurich, Computer Science Department, Advisor Peter Widmayer

3. Employment

Time	Position	Affiliation
8/2008 – present	Full Professor	Distributed Computing Group, Department of Information Technology and Electrical Engineering, ETH Zurich, Switzerland
7/2024 – 8/2025	Sabbatical	Computer Science, Stanford University, CA, USA
7/2012 – 8/2013	Sabbatical	Systems and Networking Group, Microsoft Research, WA, USA
7/2004 – 7/2008	Associate Professor	Distributed Computing Group, Department of Information Technology and Electrical Engineering, ETH Zurich, Switzerland
10/2006 – 3/2007	Sabbatical	Macquarie University, Sydney, Australia
10/2001 – 6/2004	Assistant Professor	Distributed Computing Group, Institute for Pervasive Computing, Department of Computer Science, ETH Zurich, Switzerland
4/2000 – 10/2001	Post-Doc Researcher	Systems and Networking Group, Microsoft Research, Redmond, WA, USA
4/1999 – 4/2000	Post-Doc Researcher	Computer Science Department, Brown University, Providence, RI

4. Institutional Responsibilities

Taking turns on being head of the Computer Engineering and Networks Laboratory; representative for ICT domain at Information Technology and Electrical Engineering Department; member of the ICT

commission of ETH Zurich; core member of the ETH AI Center; member of the ETH Risk Center; founding member of the ETH Blockchain Initiative; member of the ETH FinsureTech Hub.

5. Approved Research Projects

19 grants from public organizations (mostly SNSF, but also NCCR, SERI/CTI, ETH, EU) and Private Organizations (Microsoft Research, Huawei, Hasler Stiftung). See full CV for a comprehensive list.

6. Supervision of Junior Researchers at Graduate and Postgraduate Level

Currently 20 PhD students. So far about 50 successful PhD graduates. Five PhD graduates have won the ETH medal for their doctoral theses. Some former PhD students are now professors: Zeta Avarikioti (TU Vienna), Sebastian Brandt (CISPA), Klaus-Tycho Förster (TU Dortmund), Olga Goussevskaia (Minas Gerais), Barbara Keller (Aalto), Fabian Kuhn (Freiburg), Christoph Lenzen (CISPA), Thomas Moscibroda (Tsinghua), Stefan Schmid (TU Berlin), Johannes Schneider (Liechtenstein), Jara Uitto (Aalto), Ye Wang (Macau). Two former members on the postdoc level, bot are professors (Yuval Emek, now Technion; Lucianna Kiffer, now IMDEA). Some PhD graduates founded startup companies: e.g., Wuala, StreamForge, BitSplitters. Some PhD graduates joined existing companies, e.g., 8 former PhD students work at Google.

7. Teaching Activities

Currently teaching the following courses: Computational Thinking (Undergraduate 3rd year course, part of regular curriculum), Computer Systems (3rd year core course, taught with Timothy Roscoe), Discrete Event Systems (3rd year core course, taught with Lana Josipovic and Laurent Vanbever), Principles of Distributed Computing (Master level course), Decentralized Finance (Master level course, taught with various colleagues), Seminar in Deep Reinforcement Learning, Labs Hands-On Deep Learning, CodeJam and Scavenger Hunt (all three are 2nd year practical labs). In total, these courses have about 1,000 students each year. On top of that our group supervises about 100 student theses each year.

8. Membership in Panels & Boards / Scientific Reviewing Activities / Conference Organization

Member of many hiring and reviewing committees, and member of more than 100 renowned international program committees. Many chairing roles, several roles as program committee chair. All these roles are listed in the full CV: https://disco.ethz.ch/members/wroger/bio.php.

9. Prizes, Awards, Fellowships

Various best paper awards, on average about two per year. In addition, winning the Prize for Innovations in Distributed Computing in 2012, for "extensive contributions to the study of distributed approximation."