Family name, First name: Babaoglu, Ozalp

Researcher unique identifier ORCID-ID: 0000-0001-5848-1319

**Date of birth**: 10 August 1955 **Nationality:** USA, Turkish

URL for web site: http://www.cs.unibo.it/babaoglu

**Bibliometrics** (Google Scholar)

**h-index:** 43 **i10-index:** 70

**Total citations:** 6749

#### **EDUCATION**

1981 PhD in Computer Science, University of California at Berkeley, USA

1977 MSc in Computer Science, University of California at Berkeley, USA

1976 BSc in *Electrical Engineering*, George Washington University, Washington, DC, USA

### **CURRENT POSITION**

1988 – present *Professor*, Department of Computer Science and Engineering, University of Bologna.

#### PREVIOUS POSITIONS

1987 – 1988 Associate Professor, Department of Computer Science, Cornell University, USA 1981 – 1987 Assistant Professor, Department of Computer Science, Cornell University, USA

#### FELLOWSHIPS AND AWARDS

- 2015 IEEE International Conference on Cloud and Autonomic Computing, Certificate of Appreciation
- 2007 IEEE Computer Society, Certificate of Appreciation
- 2005 Autonomic Computing Conference, Certificate of Appreciation
- 2002 Fellow of the ACM (for "contributions to fault-tolerant distributed computing, BSD Unix, and for leadership in the European distributed systems community")
- 1993 Received Lifetime Achievement Award from USENIX Association
- 1989 Received Recognition Award for contributions made to the UNIX System from UNIX International
- 1981 Received Sakrison Memorial Prize (with Bill Joy) from the University of California, Berkeley
- 1980 Received Fellowship for Foreign Mathematicians from the National Research Council of Italy

## **SUPERVISION of MSc Students**

During my career at Cornell and the University of Bologna I have supervised over 80 MSc students.

# **SUPERVISION of PhD Students**

- 2009 Andrea Marcozzi (now Programmer at Lepida SpA, Italy)
- 2007 Gian Paolo Jesi (now Researcher at the University of Bologna, Italy)
- 2007 Stefano Arteconi (now Programmer at NoemaLife, Italy)
- 2005 Jaksa Vuckovic (now Software Engineer at Zuhlke Engineering, UK)
- 2000 Alberto Montresor (now Associate Professor at the University of Trento, Italy)
- 1985 Rogério Drummond (now Professor at the Universidade Estadual de Campinas, Brazil)

### **SUPERVISION of Postdoctoral Fellows**

2019 - present Rachele Luzi

2014 - 2016 Alina Sîrbu (now Assistant Professor at the University of Pisa, Italy)

Fabio Picconi (now Scientist at Technicolor, France)

2003 – 2007 David Hales (now Lecturer at the University of Szeged, Hungary)

2003 – 2005 Simon Patarin (now Software Engineer at Google, France)

2002 – 2006 Mark Jelasity (now Professor at the University of Szeged, Hungary)

2002 – 2004 Vance Maverick (now Software Engineer at Google, Mountain View, USA) 2000 – 2005 Alberto Montresor (now Associate Professor at the University of Trento, Italy)

Mary Baker (now Researcher at HP Labs, Palo Alto, USA)

### **TEACHING**

1981 – 1988 Cornell University. Taught undergraduate and graduate courses in Computer

Architecture, Programming, Operating Systems, Distributed Systems

1988 – present *University of Bologna*. Taught undergraduate and graduate courses in Programming, Operating Systems, Algorithms, Computer System Security, Complex Systems, Network Science.

## INSTITUTIONAL RESPONSIBILITIES

2010 – 2012 Department Head, Computer Science, University of Bologna

2006 - present Resident Fellow, Institute of Advanced Studies, University of Bologna

2004 – 2010 *Member*, "Research Observatory", University of Bologna

1994 – 2008 *Director*, PhD Program in Computer Science, University of Bologna

### **COMMISSIONS OF TRUST**

2017 *Member*, ACM TAAS Editor-in-Chief search committee

2007 – 2019 *Founding Member, Steering Committee*, International Conference on Self-Adaptive and Self-Organizing Systems (SASO)

2003 – 2005 Review Panel Member, FET projects COSIN, PEPITO, SECURE

2003 Panel Member, FET Initiatives on Global Computing

2001 – present *Steering Committee*, *Scientific Advisory Board*, Bertinoro international Center for informatics (BiCi)

2001 – 2005 Panel Member, FET Initiatives on Complex Systems

## **Top-ten Publications** (ordered by number of citations)

- 1. Gossip-Based Aggregation in Large Dynamic Networks. *ACM Transactions on Computer Systems* 23:3, (August 2005), 219–252. (With M. Jelasity and A. Montresor) (with **890 citations**)
- 2. Anthill: A Framework for the Development of Agent-Based Peer-to-Peer Systems. In *Proceedings of the 22nd IEEE* International Conference on Distributed Computing Systems (*ICDCS*), Vienna, Austria, July 2002, 15–22. (With A. Montresor and H. Meling) (**451 citations**)
- 3. Consistent Global States of Distributed Systems: Fundamental Concepts and Mechanisms. In *Distributed Systems*, Second Edition, Sape J. Mullender (Ed.), Chapter 4, Addison-Wesley-ACM Press, New York, 1993, 55–96. (With K. Marzullo) (376 citations)
- 4. Design Patterns from Biology for Distributed Computing. *ACM Transactions on Autonomous and Adaptive Systems* 1:1, (September 2006), 26–66. (With G. Canright, A. Deutsch, G. Di Caro, F. Ducatelle, L. Gambardella, N. Ganguly, M. Jelasity, R. Montemanni, A. Montresor and T. Urnes) (372 citations)
- 5. T-Man: Gossip-based Overlay Topology Management. *Computer Networks* 53:13, 2321-2339. (August 2009) (With M. Jelasity) (**261 citations**)
- 6. Messor: Load-Balancing through a Swarm of Autonomous Agents. In *Proceedings of the 1st Workshop on Agent and Peer-to-Peer Systems*, Bologna, Italy, July 2002, 97–108. (With A. Montresor and H. Meling) (239 citations)
- 7. RELACS: A Communications Infrastructure for Constructing Reliable Applications in Large-Scale Distributed Systems. In *Proceedings of the 28th Hawaii International Conference on System Sciences*, Maui, January 1995, vol. II, 612--621. (With R. Davoli, L.-A. Giachini and M.G. Baker) (**162 citations**)
- 8. Design and Implementation of a P2P Cloud System. In *Proceedings of the 27th ACM Symposium on Applied Computing (SAC 2012)*, Trento, Italy, March 2012, 412–417. (With M. Marzolla and M. Tamburini) (**145 citations**)
- 9. Online Reconfiguration in Replicated Databases Based on Group Communication. In *Proceedings of the International Conference on Dependable Systems and Networks (DSN 2001)*, Goteborg, Sweden, July 2001, 117—126. (With B. Kemme and A. Bartoli) (145 citations)
- 10.Server Consolidation in Clouds through Gossiping. *Proceedings IEEE International Symposium on World of Wireless, Mobile and Multimedia Networks* (WoWMoM), Lucca, Italy, June 2011, 1–6. (With M. Marzolla and F. Panzieri) (**116 citations**)

# **Books Edited** (Selected)

- 1. Self-Star Properties in Complex Information Systems, Lecture Notes in Computer Science "Hot Topics", vol. 3460, Springer-Verlag, Berlin 2005. (With M. Jelasity, A. Montresor, C. Fetzer, S. Leonardi, A. van Moorsel and M. van Steen) (110 citations)
- 2. *Distributed Algorithms*, Lecture Notes in Computer Science, vol. 1151, Springer-Verlag, Berlin 1996. (With K. Marzullo)

### **Keynote Addresses and Distinguished Lectures (Selected)**

- 1. Keynote Address, *IEEE International Conference on Cloud and Autonomic Computing*, Cambridge, MA (September 2015)
- 2. Keynote Address, *Workshop on Autonomic Distributed Systems*, Vitoria, Espirito Santo, Brazil (May 2015)
- 3. Keynote Address, NSF Workshop On Trustworthiness in Emerging Distributed Systems and Networks, Koc University, Istanbul, Turkey (June 2012)
- 4. Keynote Address, *Quantitative Informatics 2011*, Lipari, Italy (June 2011)
- 5. Keynote Address, ACM Computing Frontiers, Bertinoro, Italy (May 2010)
- 6. Distinguished Lecture, *Irish Software Engineering Research Centre*, University College Dublin, Dublin, Ireland, (May 2008)
- 7. Distinguished Lecture, VR Linnaeus Research Centre, KTH, Stockholm, Sweden, (May 2008)
- 8. Distinguished Lecture, *Royal Society*, London, UK (March 2008)
- 9. Keynote Address, *International Conference on Autonomic Computing and Communication Systems*, Frascati, Italy (October 2007)

- 10. Distinguished Lecture, European Center for Living Technology, Venice, Italy (May 2007)
- 11. Distinguished Lecture, 50th Anniversary of the founding of Middle East Technical University, Ankara, Turkey (October 2006)
- 12. Keynote Address, *International Conference on Autonomic Computing*, Seattle, WA USA (June 2005)

# **Member of Editorial Boards**

2005 - present Associate Editor, ACM Transactions on Autonomous and Adaptive Systems

1994 – 2012 Associate Editor, ACM Transactions on Computer Systems

1990 – 2011 Associate Editor, ACM Springer-Verlag Distributed Computing