

Editorial

Bashar Nuseibeh

It is my pleasure to welcome a number of new associate editors to the editorial board of the *IEEE Transactions on Software Engineering*. They are: Luciano Baresi, Daniela Damian, Robert DeLine, Audris Mockus, Gail Murphy, Mauro Pezze, Gian Pietro Pico, Helen Sharp, and Paolo Tonella. They bring a wealth of expertise in a broad range of research areas within software engineering, consolidating traditional strengths in areas such as software testing, and strengthening areas such as empirical studies of software development, mobile computing, and adaptive systems. Their short biographies are included below. At the same time, I would like to bid farewell to those associate editors whose terms of service have ended: Martin Robillard, Peggy Storey, and Tetsuo Tamai. I thank them for their distinguished contributions over a number of years, and for continuing to handle submitted manuscripts already on their editorial stack.

Bashar Nuseibeh
Editor in Chief



Luciano Baresi is an associate professor at the Politecnico di Milano. He was also a visiting professor at the University of Oregon and a visiting researcher at the University of Paderborn, Germany. He is currently the chair of the IFIP working group (2.14/6.12/8.10) on Services-Oriented Computing and was the program cochair of FASE '06 (ETAPS Conference on Fundamental Approaches on Software Engineering), ICWE '07 (International Conference on Web Engineering), ICSOC '09 (International Conference on Service-Oriented Computing), and SEAMS '12 (Symposium on Software Engineering for Adaptive and Self-Managing Systems), while he will be the program co-chair of ESEC/FSE'13 (Joint European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering). He is also a regular program committee member of important

conferences on service-oriented computing, self-adaptive systems, and software engineering. He has coauthored some 120 papers; some of which appeared in the *ACM Transactions on Software Engineering and Methodology*, *IEEE Transactions on Software Engineering*, *Computer*, *IEEE Software*, and *IEEE Internet Computing*. His research interests touch different aspects of software engineering. While he started with formal approaches for modeling and specification languages, he then moved to UML and the design of web-based applications. He is now interested in distributed systems, service-based applications, and in the different aspects of mobile and ubiquitous software systems. This research has been funded by national and international projects: He has coordinated the participation of Politecnico di Milano in the following EU-funded projects: MOMOCS, SLA@SOI, MADES, and Indenica.



Daniela Damian is an associate professor in the Department of Computer Science at the University of Victoria, where she leads research in the Software Engineering Global interAction Laboratory (SEGAL, segal.uvic.ca). Her research interests include software engineering, requirements engineering, computer-supported cooperative work, and empirical software engineering. Her recent work has studied the interplay of the social and technical aspects of developers' coordination in large, geographically distributed software projects. Her research methodologies involve extensive field work and in-situ studies of developers through collaborations with industrial partners such as IBM, General Motors, Siemens, and Dell. She has served on the program committees of several software engineering conferences, was the program cochair for the First International Conference on

Global Software Engineering (ICGSE06), and was a guest editor of the *IEEE Software* special issue on global software engineering in 2006. She is currently serving on the editorial boards of the *Journal of Requirements Engineering*, is the Requirements Engineering Area Editor for the *Journal of Empirical Software Engineering*, and is the Human Aspects Area Editor for the *Journal of Software and Systems*.



Robert DeLine received the PhD degree from Carnegie Mellon University in 1999 and the MS degree from the University of Virginia in 1993. He is a principal researcher at Microsoft Research (MSR) who studies the work practices of software developers and, more recently, data scientists. From 2005 to 2012, he founded and managed a research group dedicated to the user-centered design of software development tools, with a focus on information seeking, program comprehension, and task management. In collaboration with colleagues, he has invented development environments that exploit spatial memory (Debugger Canvas, Code Canvas), a recommendation system for program comprehension (Team Tracks), type systems to enforce API protocols (Fugue, Vault), a software architecture environment (UniCon), and a popular environment for end-user programming (Alice).



Audris Mockus received the BS and MS degrees in applied mathematics from the Moscow Institute of Physics and Technology in 1988. In 1991 he received the MS degree and in 1994 he received the PhD degree in statistics from Carnegie Mellon University. He wants to know how and why software development and other complicated systems work and accomplish anything. He uses data mining, statistics, optimization, and visualization to reconstruct reality from the prolific and varied digital traces these systems leave in the course of operation. The reconstruction starts from the integration of traces from disparate tools that track code, bugs, employees, equipment, money, customers, and communications. Models of individuals and groups are then created and validated to understand and predict how and why they act, sometimes achieving a lot and sometimes destroying what has been accomplished. He works at Avaya Labs Research.

Previously he worked at Software Production Research Department of Bell Labs.



Gail Murphy is a professor in the Department of Computer Science at the University of British Columbia. She is also a co-founder and Chief Science Officer at Tasktop Technologies Incorporated. Her research focuses on software developer productivity. She received the BSc (Honours) degree in computing science from the University of Alberta and the MS and PhD degrees from the University of Washington. Prior to graduate school, she worked as a software engineer for five years in the telecommunications industry. She was an associate editor of the *ACM Transactions on Software Engineering and Methodology* from 2005 to 2013 and is a member of the subeditorial board for Contributed Articles for the *Communications of the ACM*. She was the program chair for the 2008 ACM SIGSOFT Foundations of Software Engineering Conference and a co-program chair for the

2012 International Conference on Software Engineering.



Mauro Pezzè received the Laurea degree in computer science from the University of Pisa, Italy, and the Doctorate degree in computer science from the Politecnico di Milano, Italy. He is a professor of software engineering and the dean of the Faculty of Informatics at the University of Lugano, Italy, and a professor of software engineering at the University of Milano Bicocca, Italy. His general research interests are in the areas of software engineering, software testing and analysis, autonomic computing, self-healing software systems, service-based applications and service level agreement protection. Prior to joining the University of Milano Bicocca and the University of Lugano as a full professor, he was an assistant and an associate professor at the Politecnico di Milano, and a visiting

researcher at the University of Edinburgh and the University of California Irvine. He was an associate editor of the *ACM Transactions on Software Engineering and Methodology* from 2006 to 2013, and is a member of the Steering Committee of the ACM International Conference on Software Testing and Analysis (ISSTA) and of the International Conference on Software Engineering (ICSE). He is the general chair of the ACM International Symposium on Software Testing and Analysis (ISSTA) in 2013, and was the program cochair of the International Conference on Software Engineering (ICSE) in 2011 and the program chair of the ACM International Symposium on Software Testing and Analysis (ISSTA) in 2006. He is coauthor of the book *Software Testing and Analysis, Process, Principles and Techniques* (John Wiley, 2008), and he is the author or coauthor of more than 100 refereed journal and conference papers.



Gian Pietro Picco is a professor in the Department of Information Engineering and Computer Science (DISI) at the University of Trento, Italy, where he also serves as Department Chair. Previously, he was on the faculty of Washington University, St. Louis, Missouri, from 1998-1999, and of the Politecnico di Milano, Italy, from 1999-2006. The goal of his current research is to ease the development of modern distributed systems through the design and implementation of appropriate programming abstractions and of communication protocols efficiently supporting them. His work spans the research fields of software engineering, middleware, and networking, and is oriented in particular toward wireless sensor networks, mobile computing, and large-scale distributed systems. He has been involved in a number of national and international projects on these topics. He is the recipient,

along with his coauthors, of the Most Influential Paper (MIP) Award for his paper on mobile code design paradigms from ICSE '97. He also received Best Paper Awards at IPSN '09 and IPSN '11, and the Mark Weiser Award at PerCom '12. He has served as an associate editor for the *Elsevier Journal of Pervasive and Mobile Computing (JPMC)* and he is currently an associate editor for the *ACM Transactions on Sensor Networks (TOSN)*.



Helen Sharp is a professor of software engineering at the Open University, United Kingdom. Her research focuses on the study of professional software practice and the effect of human and social aspects on software development. She has been conducting qualitative empirical studies of software practice since the early 1990s, and delights in adopting techniques and theoretical frameworks from other disciplines such as distributed cognition, cognitive dimensions, and technological frames. She is very active in both the software engineering and interaction design (HCI) communities and has had a long association with practitioner-related conferences. She is joint author of one of the leading textbooks on *Interaction Design* (id-book.com), now in its third edition. She is a Chartered Engineer and a member of the IEEE Computer Society.



Paolo Tonella received the PhD degree in software engineering from the University of Padova in 1999, with the thesis “Code Analysis in Support to Software Maintenance.” He is head of the Software Engineering Research Unit at Fondazione Bruno Kessler (FBK) in Trento, Italy. In 2011 he was awarded the ICSE 2001 MIP (Most Influential Paper) award for his paper: “Analysis and Testing of Web Applications.” He is the author of *Reverse Engineering of Object Oriented Code* (Springer, 2005). He has participated in several industrial and EU projects on software analysis and testing. He was program chair of ICSM ’11 and ICPC ’07 and general chair of ISSTA ’10 and ICSM ’12. Among others, he has served on the program committees of ICSE, FSE, ICSM, ISSTA, ICST, ICPC. In 2007, He was ranked among the top-50 Software Engineering scholars (*Communications of the ACM*, vol. 50, no. 6, pp. 81-85).

He has been recognized as a distinguished *ACM Transactions on Software Engineering and Methodology* referee several times in recent years (including 2011-2012). His key contributions to the research in software engineering include: a comprehensive reverse engineering method for object oriented software, pioneering research on model extraction for web testing, and foundational work on evolutionary testing of object oriented software.