

CURRICULUM VITAE

David S. Rosenblum

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Planning Research Corporation Professor and Chair
Department of Computer Science
George Mason University
4305 Nguyen Engineering Building, MSN 4A5
4400 University Drive
Fairfax, VA 22030
USA

+1 (703) 993-1530 (office)
+1 (703) 993-1710 (fax)
dsr@gmu.edu (work)
dsrosenblum@alumni.stanford.edu (personal)
<https://cs.gmu.edu/~dsr>
<https://www.linkedin.com/in/dsrosenblum>

h-index = 54, *i10-index* = 110 (Google Scholar, January 26, 2021); *Erdős number* ≤ 4

Summary of Key Accomplishments and Research Interests

Fellow of the ACM and IEEE
Recipient of the ACM SIGSOFT Distinguished Service Award
Recipient of two significant test-of-time awards for research papers
Previously Editor-in-Chief of one of the leading archival journals in software engineering (ACM TOSEM)
Previously Chair of the leading international professional group in software engineering (ACM SIGSOFT)
Produced significant, highly cited research results in formal methods, software testing, software architecture, distributed systems, ubiquitous computing, and applied machine learning
Secured tens of millions of dollars in extramural research funding
Graduated 14 PhD students to date with strong placements in both academia and industry
Held professorships and leadership positions in academia in three countries on three continents
Held research and leadership positions in industry
Current research is on novel machine learning techniques for ubiquitous computing and software testing

Honors and Awards

ACM SIGSOFT Distinguished Service Award, 2018
Fellow of the Association for Computing Machinery (ACM), 2010
“For contributions to software testing and distributed systems, and for service to the software engineering community”
Fellow of the Institute of Electrical and Electronics Engineers (IEEE), 2006
“For contributions to scalable, distributed component- and event-based software systems”
Chartered Fellow of the Institution of Engineering and Technology (IET), 2005
Chartered Fellow of the British Computer Society (BCS), 2005
Senior Member of the Singapore Computer Society (SCS), 2013
Featured in “People of ACM”, Jan. 5, 2016,
<http://www.acm.org/articles/people-of-acm/2016/david-s-rosenblum>
2008 ACM SIGSOFT Impact Paper Award, ESEC/FSE 1997 paper (#C16)
2002 ICSE Most Influential Paper Award, ICSE 1992 paper (#C8)
2nd Prize, ACM SIGSOFT FSE 2014 Visions & Challenges paper (#C72)
Best Demo Award, IoT 2015 Demo (presented by Max Pagel) (#C75)
Provost’s Chair Professor, Dept. of Computer Science, National University of Singapore, 2016
Wolfson Research Merit Award, The Royal Society, UK, 2004–2009
CAREER Award, US National Science Foundation, 1997–2001
Best Graduate Student Paper Award, ACM Special Interest Group on Ada (SIGAda), 1986 (#J2)
L.F. Connell Award, Best Undergraduate Student, Dept. of Physics, North Texas State Univ., 1982

Education

- Ph.D. *Electrical Engineering (Computer Systems)*, 1988
Stanford University, Stanford, CA, USA
- M.S. *Electrical Engineering (Computer Systems)*, 1987
Stanford University, Stanford, CA, USA
- M.S. *Computer Sciences*, 1983
North Texas State University, Denton, TX, USA
- B.S. (summa) *Computer Sciences (major), Mathematics (minor)*, 1982
North Texas State University, Denton, TX, USA

Professional Certifications

- Senior Management Programme, National University of Singapore, 2012
- Chartered Engineer (CEng), Engineering Council UK, 2006–2013 (registered with IET)

Academic Positions

- 2020– *Planning Research Corporation Endowed Chair (2020–present)*
Department Chair (2020–present)
Department of Computer Science, George Mason University, Fairfax, Virginia, USA
- 2011–2020 *Provost’s Chair Professor, Department of Computer Science (2016–2020)*
Professor, Department of Computer Science (2011–2016)
Director, NUS-Singtel Cyber Security Research & Development Laboratory (2016–2020)
Dean, School of Computing (2013–2016)
Director of the Felicitous Computing Institute (2012–2020)
Chair, School of Computing Ethical Review Committee (2019–2020)
School of Computing, National University of Singapore, Republic of Singapore
- 2004–2011 *Professor of Software Systems*
Graduate Tutor (2008–2011)
Course Coordinator, MSc in Software Systems Engineering (2004–2007)
Director, London Software Systems (2004–2008)
Head of Software Systems Engineering (2008–2011)
Deputy Head of Department (2010–2011)
Department of Computer Science, University College London, UK
- 1998–2002 *Associate Professor (1998), Assistant Professor (1996)*
Faculty Affiliate, University of California Institute for Software Research (ISR)
Associate Chair for Computing (1998–2001)
Acting Manager, Computing Support Group (1999)
Dept. of Information & Computer Science, University of California, Irvine, CA, USA
- 1996 *Part-Time Lecturer*
Department of Computer Science, Rutgers University, Piscataway, NJ, USA
- 1983–1988 *Research Assistant*
Computer Systems Laboratory, Stanford University, Stanford, CA, USA
- 1982–1983 *Teaching Fellow*
Department of Computer Sciences, North Texas State University, Denton, TX, USA
- 1981 *Programmer/Analyst*
University of Texas Health Science Center at Dallas, , TX, USA

Industry Positions

- 2001–2003 *Chief Technology Officer and Principal Architect*
PreCache Inc., Orange, CA, and Bridgewater, NJ, USA
- 1988–1996 *Member of the Technical Staff*

AT&T Bell Laboratories, Murray Hill, NJ, USA

Other Academic Appointments

- 2020– *Strategic Advisory Board*
Schaffhausen Institute of Technology (SIT), Schaffhausen, Switzerland
- 2019–2020 *Chair, Management Board*
Cryptocurrency Strategy, Techniques, and Algorithms (CRYSTAL) Centre, National University of Singapore, Singapore
- 2018–2021 *Deputy Convenor, Computer Science/Information Technology Panel*
2020 Research Assessment Exercise (RAE 2020), University Grants Committee, Hong Kong
- 2017–2019 *External Examiner, Bachelor of Computer Science (Hons) (Software Engineering)*
Faculty of Computing and Informatics, Multimedia University, Malaysia
- 2017–2019 *External Assessor, Bachelor of Software Engineering*
Faculty of Computer Science and Information Technology, Universiti Putra Malaysia, Malaysia
- 2014–2016 *Executive Committee, Services & Digital Economy Research & Development*
National Research Foundation (NRF), Singapore
- 2013–2014 *Computer Science/Information Technology Panel*
2014 Research Assessment Exercise (RAE 2014), University Grants Committee, Hong Kong
- 2015–2016 *Management Board*
Institute of Systems Science (ISS), National University of Singapore, Singapore
- 2015–2016 *Management Board*
Institute for Mathematical Sciences (IMS), National University of Singapore, Singapore
- 2013–2018 *Visiting Professor*
Department of Computer Science, University College London, London, UK
- 2013–2016 *Advisory Committee*
School of Infocomm, Republic Polytechnic, Singapore
- 2013–2016 *Management Board*
Temasek Laboratories, National University of Singapore, Singapore
- 2007–2009 *External Member, Faculty Selection Committee*
Faculty of Informatics, Università della Svizzera Italiana, Lugano, Switzerland
- 2006–2010 *External Examiner, BEng/MEng in Computer Science and Software Engineering*
External Examiner, BSc Computer Science with Business Management
External Examiner, BSc/MEng Electronic and Software Engineering
School of Computer Science, University of Birmingham, UK
- 2005– *Advisory Council*
Dept. of Computer Science & Engineering, Univ. of North Texas, Denton, TX, USA
- 2004–2010 *Honorary Professorial Research Fellow*
Department of Computing, Imperial College London, London, UK
- 2004–2007 *External Examiner, MSc in Software Engineering for the e-Economy*
External Examiner, MSc in Advanced Software Engineering
External Examiner, MSc in Advanced Distributed Systems
Department of Computer Science, University of Leicester, Leicester, UK

Other Industry Appointments

- 2019–2020 *Subcommittee on Smart Nation/Industry Transformation Maps/Emerging Technologies*
Coordinating Committee for Cybersecurity, Enterprise Singapore, Singapore

1999–2001 *Scientific Advisory Board*
HomeGopher, Inc., Tustin, CA, USA

Consulting, Review Committees, and Other Professional Service

2018 *Reviewing Committee*
Computer Science Discipline, Tianjin University, China

2017–
ACM Distinguished Member Committee
Deputy Chair, 2019
Chair, 2020

2012 *External Reviewer, Faculty Hiring Committee*
Department of Computer Science and Engineering, Aalto University, Jul. 2012

2011–2015 *ACM-IEEE Computer Society Ken Kennedy Award Committee*

2007 *Expert Reviewer, Software Product Lines Research Programme*
Lero—The Irish Software Engineering Research Centre, Univ. of Limerick, Ireland

2006 *Ex-Post Evaluation Panelist on behalf of Technopolis Ltd*
Industry PhD programme, IDA Department, Linköping University, Sweden

2004 *Senior Advisor, Shanghai Software Testing Center, Shanghai, China*

2004 *Expert Witness, individual claim in Brent County Court, London, UK*

2004–2005 *Expert Consultant, Intelligence in Future Imaging Technology (IFIT) Consortium*
Kodak Research, UK

2000–2011 *Co-Lead (with Lori A. Clarke), Software Testing and Analysis Team*
Software Engineering Impact Project

1993–1994 *Expert Witness, US Department of Labor Alien Employment Certification cases*

1990–1991 *Representative from AT&T, Formal Methods Transition Study*
Microelectronics and Computer Technology Corporation (MCC), Austin, TX, USA

Elective Offices

2001–2015 *Past Chair (2012-2015)*
Chair (2009–2012)
Vice Chair (2005–2009)
Member-at-Large (2001–2005)
ACM Special Interest Group on Software Engineering (ACM SIGSOFT)

Editorial Boards

ACM Transactions on Software Engineering and Methodology, 2005–2018
Editor-in-Chief, 2013–2018

IEEE Transactions on Software Engineering, 1998–2002
Co-Editor, Outstanding Papers of ICSE 1999, Vol. 27, No. 2, Feb. 2001
Guest Co-Editor, Best Papers of ISSTA 2007, Vol. 34, No. 5, Sep./Oct. 2008

Software Process Improvement and Practice, 1997–1998

Current Professional Memberships

Association for Computing Machinery (ACM) (Fellow)
Special Interest Group on Data Communication (SIGCOMM)
Special Interest Group on Mobility of Systems, Users, Data and Computing (SIGMOBILE)
Special Interest Group on Software Engineering (SIGSOFT)

Institute of Electrical and Electronics Engineers (IEEE) (Fellow)

Singapore Computer Society (SCS) (Senior Member)

Grants and Contracts

National University of Singapore

Singapore National Research Foundation (NRF), National Satellite of Excellence in Trustworthy Software Systems (NSoE-TSS) Core Technologies, *Evaluating the Trustworthiness of Deep Learning Systems*, NSOE-TSS2019-05. S\$418,400, Oct. 2019–Sep. 2021. Sole PI.

Singapore National Research Foundation (NRF), *NUS-Singtel Corporate Research Laboratory in Cyber Security*, S\$42,768,245 (funded with S\$14,129,194 each from NRF and Singtel and S\$14,509,857 from NUS), Jul. 2016–Jun. 2021. Lead PI and Lab Director.

National University of Singapore – Humboldt Universität zu Berlin Profile Partnership, *Efficient Probabilistic Verification of Reconfigurable Software System*. S\$23,550.00, Jul. 2016–Jun. 2017. PI for NUS, with Lars Grunske as PI for HU.

Singapore Agency for Science, Technology and Research (A*STAR), Science and Engineering Research Council (SERC), Public Sector Research Funding (PSF). *Ambient Web: Towards Write Once, Run Everywhere Mobile IoT Applications*, 1521200084. S\$648,750.00, Apr. 2016–Mar. 2019. Sole PI.

Singapore Ministry of Education (MOE), Academic Research Fund (AcRF) Tier 2. *Modeling and Analysis of Stochastic Systems with Perturbed Parameters*, MOE2015-T2-1-137. S\$417,705.60, Dec. 2015–Feb. 2019. Sole PI.

Microsoft Research Asia. *Inferring People's Mood and Context: Methods and Framework*, 754074. S\$25,037.00, Apr. 2013–Apr. 2014. Co-PI w/Stanislaw Jarzabek as PI.

National University of Singapore, School of Computing and Office of the Deputy President for Research & Technology. *Felicitous Computing Institute*, R-252-000-473-133 and R-252-000-473-750. S\$2,000,000.00, Jan. 2012–Dec. 2015. PI and Institute Director.

National University of Singapore, Singapore Ministry of Education Academic Research Fund Tier 1. *Advances in Probabilistic Modeling and Analysis*, R-252-000-458-133, S\$300,000.00, Jun. 2011–Nov. 2014. Sole PI.

University College London

European Office of Aerospace Research and Development (EOARD), US Air Force Office of Scientific Research (AFOSR). *Enhancing the Dependability of Complex Missions through Automated Analysis*, FA8655-10-1-3007, US\$194,295.00, Jan. 2010–Jul. 2013. Sole PI.

UK Engineering and Physical Sciences Research Council (EPSRC). *UbiComp Grand Challenge*, EP/F013442/1, travel grant for Sebastian Elbaum. £1,660, Jun. 2008–Sep. 2008. Sole PI.

UK Engineering and Physical Sciences Research Council (EPSRC). *Improving Medical Safety using Software Engineering Technology*, EP/E062245/1, visiting researcher grant for Leon J. Osterweil and Lori A. Clarke. £71,417.81, Apr. 2007–Aug. 2007. Sole PI.

UK Engineering and Physical Sciences Research Council (EPSRC). *Testing Techniques for Context-Aware Ubiquitous Systems*, EP/E006191/1, visiting researcher grant for Sebastian Elbaum. £54,992.99, Aug. 2006–Dec. 2006. Sole PI.

UK Engineering and Physical Sciences Research Council (EPSRC), Wired and Wireless Intelligent Networked Systems (WINES) Programme. *UbiVal: Fundamental Approaches to Validation of Ubiquitous Computing Applications and Infrastructures*, EP/D077273/1, project at University College London, University of Birmingham, Imperial College London, Cambridge University and University of Oxford. £1,610,781.58 (including £634,475.93 for University College London), Oct. 2006–Sep. 2010. Project Director.

European Commission, Mobile and Wireless Services Beyond 3G Strategic Objective, Information Society Technologies (IST), Sixth Framework Programme (FP6). *PLASTIC: Providing dependable and Adaptive Service Technology for pervasive Information and Communication*, EU-IST-2005-026955, specific targeted research project (STREP) of 11 partners coordinated by Valérie Issarny of INRIA. €2,500,000 (including €285,000 for University College London), Feb. 2006–Jul. 2008. Co-PI.

European Commission, Global Computing II Programme, Future and Emerging Technologies (FET), Information Society Technologies (IST), Sixth Framework Programme (FP6). *SENSORIA: Software*

Engineering for Service-Oriented Overlay Computers, EU-IST-3-016004-IP-09, integrated project (IP) of 18 partners coordinated by Martin Wirsing of LMU München. €8,150,000 (including €375,748 for University College London), Sep. 2005–Aug. 2009. Site Leader for UCL, Work Package Leader (WP6, Deployment and Reengineering).

The Royal Society, Wolfson Research Merit Award, £200,000, Apr. 2004–Mar. 2009. Sole PI.

University of California, Irvine

US Defense Advanced Research Projects Agency (DARPA), Information Systems Office (ISO), Program in Dynamic Assembly for System Adaptability, Dependability, and Assurance (DASADA). *Proteus: Assessment and Adaptation through Dynamic Architecture Technology*, F30602-00-2-0607. US\$1,400,000, Jun. 2000–Jun. 2003. Co-PI with PI Richard N. Taylor, co-PIs David F. Redmiles and Adriaan W. van der Hoek.

US Defense Advanced Research Projects Agency (DARPA), Information Technology Office (ITO), Program in Runtime Environments for Networked, Embedded Systems (RENES). *SensOS: Architecture-centric Dynamic Adaptation of Deeply Networked Embedded Systems*, F30602-99-C-0174. US\$980,400 (including US\$443,313 for UC Irvine), Sep. 1999–Jan. 2001. Co-PI with PI Richard N. Taylor.

US Air Force Office of Scientific Research, New World Vistas Program. *Specification and Dynamic Checking of Composition Constraints in Distributed Component-Based Systems*, F49620-98-1-0061. US\$278,767, Nov. 1997–Oct. 2001. Sole PI.

US National Science Foundation, Software Engineering & Languages Program, Faculty Early Career Development (CAREER) Award. *CAREER: Mechanisms for Ensuring the Integrity of Distributed Object Systems*, CCR-9701973. US\$200,000, Jul. 1997–Jun. 2001. Sole PI.

University of California MICRO Program, *Specifying and Checking Integrity Constraints in Distributed Avionics Systems*, 97-151/UCM-110-720842AK. US\$7,959, Jul. 1997–Dec. 1998. Co-sponsored by Northrop Grumman Corporation. Sole PI.

University of California, Irvine, Department of Information and Computer Science, Research & Travel Award, US\$2,623, 1998. Sole PI.

University of California, Irvine, Department of Information and Computer Science, Research & Travel Award, US\$2,300, 1997. Sole PI.

Patents

- P11. Y. Huang, A.W.P. Fung, D.S. Rosenblum, S. Yajnik, R. Teodorescu, T.W. Chen, C.-M. Lin, C.Y. Wang, P.F. Yang and R.C. Leng, *Packing routing via payload inspection for alert services, for digital content delivery and for quality of service management and caching with selective multicasting in a publish-subscribe network*, Korea Patent, registration no. 1009852370000, Sep. 28, 2010.
- P10. P.F. Yang, T.W. Chen, A.W.P. Fung, D.S. Rosenblum, S. Yajnik, C.Y. Wang, C.M. Lin, Y. Huang and R. Teodorescu, *Method and apparatus for reliable and efficient content-based routing and query and response in a publish-subscribe network*, Korea Patent, registration no. 1009715060000, Jul. 14, 2010.
- P9. T.-W. Chen, A.W.P. Fung, D.S. Rosenblum and P.-F. Yang, *Method and apparatus for content-based packet routing using compact filter storage and off-line pre-computation*, US Patent 7,653,753, Jan. 26, 2010.
- P8. D.S. Rosenblum and R. Teodorescu, *Method and apparatus for implementing query-response interactions in a publish-subscribe network*, US Patent 7,627,603, Dec. 1, 2009.
- P7. T.-W. Chen, A.W.P. Fung, D.S. Rosenblum and P.-F. Yang, *Method and apparatus for propagating content filters for a publish-subscribe network*, US Patent 7,551,629, Jun. 23, 2009.
- P6. P.-F. Yang, T.-W. Chen, A.W.P. Fung, D.S. Rosenblum, S. Yajnik, C.-Y. Wang, C.-M. Lin, Y. Huang and R. Teodorescu, *Method and apparatus for reliable and efficient content-based routing and query and response in a publish-subscribe network*, China Patent, publication no. 1656474, Feb. 4, 2009.
- P5. D.S. Rosenblum, *Method for sending and receiving a Boolean function over a network*, US Patent 7,117,270, Oct. 3, 2006.
- P4. T.-W. Chen, A.W. Fung, P.-F. Yang, Y. Huang, C.-M. Lin, S. Yajnik, C.-Y. Wang and D.S. Rosenblum, *Packet routing via payload inspection and subscription processing in a publish-subscribe network*, Hong Kong Patent 1082858, Jun. 16, 2006.

- P3. D.S. Rosenblum, *Method for storing Boolean functions to enable evaluation, modification, reuse, and delivery over a network*, US Patent 6,910,033, Jun. 21, 2005.
- P2. T.-W. Chen, A.W. Fung, P.-F. Yang, Y. Huang, C.-M. Lin, S. Yajnik, C.-Y. Wang and D.S. Rosenblum, *Packet routing via payload inspection and subscription processing in a publish-subscribe network*, Taiwan Patent 571531, Jan. 11, 2004.
- P1. Y.F.R. Chen, D.S. Rosenblum and K.-P. Vo, *System and method for selecting test units to be re-run in software regression testing*, US Patent 5,673,387, Sep. 30, 1997.

Publications

Edited Books

- EB4. D. Bianculli, N. Medvidović and D.S. Rosenblum (editors), *40 Editions of ICSE—the ruby anniversary celebration*, limited edition book distributed at the 40th Int'l Conf. Software Engineering, Gothenburg, Sweden, May–Jun. 2018. Available online at <https://www.icse2018.org/info/50-years-of-se> (last accessed Jun. 3, 2018).
- EB3. D.S. Rosenblum and G. Taentzer (co-editors), *Proc. 13th Int'l Conf. Fundamental Approaches to Software Engineering (FASE 2010)*, Springer LNCS 6013, Mar. 2010.
- EB2. J. Estublier and D.S. Rosenblum (co-editors), *Proc. 26th Int'l Conf. Software Engineering (ICSE 2004)*, IEEE CS Press, May 2004.
- EB1. D.S. Rosenblum (editor), *Proc. ACM SIGSOFT 2000 Eighth Int'l Symp. Foundations of Software Engineering (FSE 2000)*, ACM Press, Nov. 2000.

Chapters in Edited Books

- BC8. A. Mukhija, D.S. Rosenblum, H. Foster and S. Uchitel, “Runtime Support for Dynamic and Adaptive Service Composition”, in Part VII of *Rigorous Software Engineering for Service-Oriented Systems: Results of the SENSORIA Project on Software Engineering for Service-Oriented Computing*, Springer LNCS 6582, 2011, pp. 585–603.
- BC7. H. Foster, A. Mukhija, D.S. Rosenblum and S. Uchitel, “Specification and Analysis of Dynamically-Reconfigurable Service Architectures”, in Part V of *Rigorous Software Engineering for Service-Oriented Systems: Results of the SENSORIA Project on Software Engineering for Service-Oriented Computing*, Springer LNCS 6582, 2011, pp. 428–446.
- BC6. A. Carzaniga, D.S. Rosenblum and A.L. Wolf, “Design and Evaluation of a Wide-Area Event Notification Service”, in *Foundations of Intrusion Tolerant Systems*, DARPA Program on Organically Assured and Survivable Information Systems (OASIS), IEEE Computer Society, 2003, pp. 283–334. Invited reprint of #J16.
- BC5. A.L. Wolf and D.S. Rosenblum, “A Study in Software Process Data Capture and Analysis”, in *Process-Centered Software Engineering Environments*, IEEE Computer Society Press, 1995, pp. 361–370. Invited reprint of #C9.
- BC4. Y.-F. Chen, G.S. Fowler, D.G. Korn, E. Koutsofios, S.C. North, D.S. Rosenblum and K.-P. Vo, “Intertool Connections”, Chapter 11 of *Practical Reusable UNIX Software*, Wiley, 1995, pp. 299–336.
- BC3. D.S. Rosenblum and B. Krishnamurthy, “Generalized Event-Action Handling”, Chapter 9 of *Practical Reusable UNIX Software*, Wiley, 1995, pp. 247–274.
- BC2. D.S. Rosenblum, “Self-Checking Programs and Program Instrumentation”, Chapter 5 of *Practical Reusable UNIX Software*, B. Krishnamurthy (ed.), Wiley, 1995, pp. 159–176.
- BC1. D.S. Rosenblum, “A Methodology for the Design of Ada Transformation Tools in a DIANA Environment”, in M.V. Zelkowitz (ed.), *Reprints in Software*, third ed., IEEE Computer Society Press, 1987, pp. 84–93. Invited reprint of paper #J1.

Refereed Journal Papers

- J31. K. Ouyang, Y. Liang, Y. Liu, Z. Tong, S. Ruan, Y. Zheng and D.S. Rosenblum, “Fine-Grained Urban Flow Inference”, *IEEE Trans. Knowledge and Data Engineering*, 2020, 16pp. to appear.

- J30. G. Su, L. Liu, M. Zhang and D.S. Rosenblum, "Quantitative Verification for Monitoring Event-Streaming Systems", *IEEE Trans. Software Engineering*, 2020, 13pp., to appear.
- J29. Y. Liu, Y. Liang, K. Ouyang, S. Liu, D.S. Rosenblum and Y. Zheng, "Predicting Urban Water Quality with Ubiquitous Data—A Data-driven Approach", *IEEE Trans. Big Data*, 2020, 14pp., to appear.
- J28. H. Li, Y. Liu, N. Mamoulis and D.S. Rosenblum, "Translation-Based Sequential Recommendation for Complex Users on Sparse Data", *IEEE Trans. Knowledge and Data Engineering*, Vol. 32, No. 8, Aug. 2020, pp. 1639–1651.
- J27. O. Bataineh, D.S. Rosenblum and M. Reynolds, "Efficient Decentralized LTL Monitoring Framework using Tableau Technique", *ACM Trans. Embedded Computing Sys.*, Special Issue for ESWEEK 2019, Vol. 18, No. 5S, Oct. 2019, Article 87, 12pp. Presented at EMSOFT 2019, New York, NY, USA, Oct. 2019.
- J26. L. Liu, S. Wang, B. Hu, Q. Qiong, J. Wen and D.S. Rosenblum, "Learning Structures of Interval-Based Bayesian Networks in Probabilistic Generative Model for Human Complex Activity Recognition", *Pattern Recognition*, Vol. 81, Sep. 2018, pp. 545–561.
- J25. G. Su, Y. Feng, T. Chen and D.S. Rosenblum, "Asymptotic Perturbation Bounds for Probabilistic Model Checking with Empirically Determined Probability Parameters", *IEEE Trans. Software Engineering*, Vol. 42, No. 7, Jul. 2016, pp. 623–639.
- J24. Y. Liu, L. Nie, L. Liu and D.S. Rosenblum, "From Action to Activity: Sensor-Based Activity Recognition", *Neurocomputing*, Vol. 181, 12 Mar. 2016, pp. 108–115.
- J23. J. Lü, D.S. Rosenblum, T. Bultan, V. Issarny, S. Dustdar, M.-A. Storey and D. Zhang, "Roundtable: The Future of Software Engineering for Internet Computing", *IEEE Software*, invited contribution for Focus Section on Internetware and Beyond, Vol. 32, No. 1, Jan./Feb. 2015, pp. 91–97.
- J22. L. Duboc, E. Letier and D.S. Rosenblum, "Systematic Elaboration of Scalability Requirements through Goal-Obstacle Analysis", *IEEE Trans. Software Engineering*, Vol. 39, No.1, Jan. 2013, pp. 119–140.
- J21. M. Sama, S. Elbaum, F. Raimondi, D.S. Rosenblum and Z. Wang, "Context-Aware Adaptive Applications: Fault Patterns and Their Automated Identification", invited paper for Special Issue on the Best Papers of FSE 2008, *IEEE Trans. Software Engineering*, Vol. 36, No. 5, Sep./Oct. 2010, pp. 644–661.
- J20. M. Sama, D.S. Rosenblum, Z. Wang and S. Elbaum, "Multi-Layer Faults in the Architectures of Mobile, Context-Aware Adaptive Applications", invited paper for Special Issue on Software Architecture and Mobility, *Journal of Systems and Software*, Vol. 83, Issue 6, Jun. 2010, pp. 906–914.
- J19. L.A. Clarke and D.S. Rosenblum, "Runtime Assertion Checking", Sidebar in "Determining the Impact of Software Engineering Research on Practice", *Computer*, Vol. 41, No. 3, Mar. 2008, p.48.
- J18. A. Orso, H. Do, G. Rothermel, M.J. Harrold and D.S. Rosenblum, "Using Component Metadata to Regression Test Component-Based Software", *Software Testing, Verification & Reliability*, Vol. 17, No. 2, Jun. 2007, pp. 61–94.
- J17. N. Medvidovic, D.S. Rosenblum, J.E. Robbins and D.F. Redmiles, "Modeling Software Architectures in the Unified Modeling Language", *ACM Trans. Software Engineering and Methodology*, Vol. 11, No. 1, Jan. 2002, pp. 2–57.
- J16. A. Carzaniga, D.S. Rosenblum and A.L. Wolf, "Design and Evaluation of a Wide-Area Event Notification Service", *ACM Trans. Computer Systems*, Vol. 19, No. 3, Aug. 2001, pp. 332–383.
- J15. J. Bible, G. Rothermel and D.S. Rosenblum, "A Comparative Study of Coarse- and Fine-Grained Safe Regression Test Selection Techniques", *ACM Trans. Software Engineering and Methodology*, Vol. 10, No. 2, Apr. 2001, pp. 149–183.
- J14. M.J. Harrold, D. Rosenblum, G. Rothermel and E. Weyuker, "Empirical Studies of a Prediction Model for Regression Test Selection", *IEEE Trans. Software Engineering*, Vol. 27, No. 3, Mar. 2001, pp. 248–263.
- J13. R. Natarajan and D.S. Rosenblum, "Supporting Architectural Concerns in Component Interoperability Standards", *IEE Proceedings – Software*, Special Issue on Component-based Software Engineering, Vol. 147, No. 6, Dec. 2000, pp. 215–223.
- J12. P. Oreizy, M.M. Gorlick, R.N. Taylor, D. Heimbigner, G. Johnson, N. Medvidovic, A. Quilici, D.S. Rosenblum and A.L. Wolf, "An Architecture-based Approach to Self-Adaptive Software", *IEEE Intelligent Systems*, Vol. 14, No. 3, May/June. 1999, pp. 54–62.

- J11. D.S. Rosenblum and E.J. Weyuker, "Using Coverage Information to Predict the Cost-Effectiveness of Regression Testing Strategies", *IEEE Trans. Software Engineering*, Vol. 23, No. 3, Mar. 1997, pp. 146–156.
- J10. D.S. Rosenblum and E.J. Weyuker, "Lessons Learned from a Regression Testing Case Study", *Empirical Software Engineering*, Vol. 2, No. 2, Jun. 1997, pp. 188–191.
- J9. P.T. Devanbu, D.S. Rosenblum, A.L. Wolf, "Generating Testing and Analysis Tools with Aria", *ACM Trans. Software Engineering and Methodology*, Vol. 5, No. 1, Jan. 1996, pp. 42–62.
- J8. B. Krishnamurthy and D.S. Rosenblum, "Yeast: A General Purpose Event-Action System", *IEEE Trans. Software Engineering*, Vol. 21, No. 10, Oct. 1995, pp. 845–857.
- J7. N.S. Barghouti, D.S. Rosenblum, D.G. Belanger and C. Alliegro, "Two Case Studies in Modeling Real, Corporate Processes", *Software Process Improvement and Practice*, Vol. 1, Pilot Issue, Aug. 1995, pp. 17–32.
- J6. D.S. Rosenblum, "A Practical Approach to Programming with Assertions", *IEEE Trans. Software Engineering*, Vol. 21, No. 1, Jan. 1995, pp. 19–31. Minor correction published in Vol. 21, No. 3, Mar. 1995, p. 265.
- J5. D.S. Rosenblum, "Specifying Concurrent Systems with TSL", *IEEE Software*, Vol. 8, No. 3, May 1991, pp. 52–61.
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- “Some Open Problems in Publish/Subscribe Networking”, Second Int’l Workshop on Distributed Event-Based Systems (DEBS ’03), San Diego, CA, USA, Jun. 2003
- “Assertions a Decade Later”, ICSE ’92 Most Influential Paper Award, 2002 Int’l Conf. Software Engineering, Orlando, FL, May 2002
- “Internet Scale Event Notification”, Keynote Talk at Workshop on Internet Scale Event Notification, Irvine, CA, Jul. 1998
- “An Efficient Communication Kernel for Distributed Ada Runtime Tasking Supervisors”, Best Graduate Student Paper Award, ACM SIGAda/AdaJUG Joint Meeting., Hollywood, FL, Jan. 1987

Other Invited Conference and Workshop Talks and Panels

- Panelist, “ICSE 2016 Town Hall on ICSE 2017 Submission Limit”, 38th Int’l Conf. Software Engineering (ICSE 2016), Austin, TX, USA, May 2016
- “A Brief Look at Probabilistic Model Checking”, Dagstuhl Seminar #15017 on Formal Foundations for Networking, Schloß Dagstuhl, Germany, Feb. 2015
- “How Is Computer Science Changed by Other Disciplines?”, Panel “Interdisciplinarity: The Future of Computer Science?”, Microsoft Research Asia Faculty Summit 2014, Beijing, China, Oct. 2014
- Panelist, “Does Infrastructure Really Matter When Moving to the Front Lines?”, IBM Technology Conference & Expo 2014, Singapore, Jul. 2014
- “The Mother of All Disciplines?”, Pre-Summit Workshop for Deans, Department Chairs and Research Directors, 9th European Computer Science Summit (ECSS 2013), Amsterdam, The Netherlands, Oct. 2013
- “A Random Walk Down Memory Lane”, IEEE Computer Society Fellows’ Distinguished Public Forum, Biopolis, Singapore, Oct. 2013
- “Felicitous Computing”, NUS School of Computing Annual Research Workshop, NUS Research Institute, Suzhou, China, Jan. 2013
- “Applications and Abstractions: A Cautionary Tale”, DIMACS Working Group on Abstractions for Network Services, Architecture, and Implementation, Rutgers University, Piscataway, NJ, USA, May 2012
- “Felicitous Computing”, 5th Annual NUS School of Computing-China Research Workshop, National University of Singapore, Singapore, Jan. 2012
- “High Confidence Ubiquitous Computing Systems”, 2011 Int’l Symp. High Confidence Software (ISHCS 2011), Beijing, China, Dec. 2011
- Panelist, “Future of Software Research in Asia-Pacific/China Region”, 2011 Int’l Symp. High Confidence Software (ISHCS 2011), Beijing, China, Dec. 2011
- Panelist, “Regression Testing”, Dagstuhl Seminar #10111 on Practical Software Testing: Tool Automation and Human Factors, Schloß Dagstuhl, Germany, Mar. 2010
- Panelist, “Academic-Industrial Cooperation in Software Engineering”, XXI Sympósio Brasileiro de Engenharia de Software (SBES 2007), João Pessoa, Paraíba, Brazil, Oct. 2007

- “The Software Engineering Impact Project: Testing & Analysis” (with Lori A. Clarke), 2006 Int’l Symp. Software Testing and Analysis (ISSTA 2006), Portland, ME, USA, Jul. 2006
- “Testability and Reliability of Component-Based Software”, Pre-ICSE 2006 Workshop on Int’l Software Engineering Cooperation, Shanghai, China, Oct. 2004
- Panellist on Panel “Distributed Event-Base Processing in a Bigger Context”, Second Int’l Workshop on Distributed Event-Based Systems (DEBS ’03), San Diego, CA, Jun. 2003
- “Publish/Subscribe Architectures: Attractions, Problems and Lessons”, Panel “Event-Based Systems and Software Architectures: Out of the Shadows and Into the Mainstream”, 1st Annual Research Forum, UC Irvine Institute for Software Research, Irvine, CA, Jun. 2002
- Panellist, “Who Needs Doctors? Reporting from the Doctoral Workshop”, 22nd Int’l Conf. Software Engineering (ICSE 2000), Limerick, Ireland, Jun. 2000
- “Challenges in Exploiting Architectural Models for Software Testing”, NSF/CNR Int’l Workshop on the Role of Software Architecture in Testing and Analysis (ROSATEA), Marsala, Sicily, Italy, Jul. 1998
- “An Overview of Selective Regression Testing”, Software Engineering Tools and Technologies (SETT) Java Testing Workshop, Irvine, CA, Nov. 1996

Inaugural Lecture as Professor of Software Systems, University College London

- “Scalability in Software Systems Engineering: The Good, the Bad, and the Ugly”, 13 Dec. 2004 (with Vote of Thanks by Alexander L. Wolf)

Other Invited Talks

- “The Power and Challenges of Probabilistic Reasoning for Software Engineering”, Faculty of Computer and Information Technology, Universiti Putra Malaysia, Oct. 2018
- “The Power and Challenges of Probabilistic Reasoning for Software Engineering”, Huawei Research & Development Competence Centre (Shenzhen), May 2018
- “The Power and Challenges of Probabilistic Reasoning for Software Engineering”, Faculty of Computer and Information Sciences, Hosei University, Feb. 2018
- “Uncertainty in Computer Systems: Problems and Results”, Department of Computer Science, University of Southern California, Jan. 2017
- “Jogging While Driving, and Other Software Engineering Research Problems”, Department of Computer Science Distinguished Lecture Series, Univ. of Illinois at Chicago, Apr. 2014
- “Felicitous Computing”, Institute for Software Research (ISR) Distinguished Speaker Series, University of California, Irvine, Apr. 2013
- “Scalability of Software Systems: Concepts and Techniques”, Univ. de Buenos Aires, Jul. 2012
- “Automated Fault Identification in Context-Aware Adaptive Applications”, National University of Singapore, Aug. 2010
- “Automated Fault Identification in Context-Aware Adaptive Applications”, University of Texas at Dallas, Jun. 2010
- “Scalability: What It Is and How to Analyse It”, Univ. of Massachusetts–Amherst, Mar. 2008
- “Predicting the Reliability of Concurrent Component-Based Software”, Università della Svizzera Italiana, Lugano, Switzerland, Dec. 2005
- “Predicting the Reliability of Concurrent Component-Based Software”, Brunel University, London, UK, Nov. 2005
- “Predicting the Reliability of Concurrent Component-Based Software”, Georgia Institute of Technology, Atlanta, GA, USA, Jun. 2005
- “Publish/Subscribe Networking: Open Problems and Recent Results”, University of Nebraska-Lincoln, Lincoln, NE, USA, Mar. 2005
- “Predicting the Reliability of Concurrent Component-Based Software”, University of Nebraska-Lincoln, Lincoln, NE, USA, Mar. 2005

"Publish/Subscribe Networking: Open Problems and Recent Results", Intel Research Cambridge, Cambridge, UK, Mar. 2005

"Predicting the Reliability of Concurrent Component-Based Software", Università dell'Aquila, L'Aquila, Italy, Mar. 2005

"Two Decades of Software Systems Research", University College London, UK, Oct. 2003

"Publish/Subscribe Networking: Concepts, Results, Open Problems", Università della Svizzera Italiana, Lugano, Switzerland, Jun. 2003

"Publish/Subscribe Networking: Concepts, Results, Open Problems", University College London, London, UK, May 2003

"Publish/Subscribe Networking: Concepts, Results, Open Problems", University of Southern California, Los Angeles, CA, May 2003

"Reconciling Software Architecture Models and Software Component Standards", Politecnico di Milano, Milan, Italy, Jan. 1999

"Reconciling Software Architecture Models and Software Component Standards", Technische Universität Wien, Vienna, Austria, Jan. 1999

"Bringing Software Architecture into the Software Development Process", Southern California Process Improvement Network (SPIN), Irvine, CA, Jun. 1998

"Internet-Scale Event Observation and Notification", Bay Area Round Table (BART), Palo Alto, CA, Feb. 1998

"Validation of Distributed Component-Based Software Systems", Bay Area Round Table (BART), Palo Alto, CA, Aug. 1997

"Predicting the Cost-Effectiveness of Regression Testing Methods", University of California, Irvine, Irvine, CA, May 1996

"A Specification-Based Approach to Automated Fault Detection", University of Colorado at Boulder, Boulder, CO, Apr. 1996

"A Specification-Based Approach to Automated Fault Detection", University of Maryland, College Park, MD, Mar. 1996

"A Specification-Based Approach to Automated Fault Detection", Columbia University, New York, NY, Feb. 1996

"Experience with a Selective Regression Testing System", Clemson U., Clemson, SC, Oct. 1995

"Software Specification", Columbia University, New York, NY, Oct. 1995

"Software Specification", Rutgers University, New Brunswick, NJ, Feb. 1995

"Experience with a System for Selective Regression Testing", Polytechnic University, Brooklyn, NY, Oct. 1994

"Software Research at Bell Labs", Stanford University, Stanford, CA, Aug. 1994

"Testtube: A System for Selective Regression Testing", Siemens Corporate Research, Princeton, NJ, Mar. 1994

"Specifying and Developing Programs with Anna", New York University, New York, NY, Mar. 1991

"Validation of Tasking Supervisors with TSL Specifications", Polytechnic University, Brooklyn, NY, Nov. 1989

"Automated Testing of Distributed Ada Tasking Supervisors", AT&T Bell Laboratories, Holmdel, NJ, Sep. 1987

"Automated Testing of Distributed Ada Tasking Supervisors", Software Engineering Institute, Carnegie Mellon University, Pittsburgh, PA, May 1987

"An Efficient Distributed Implementation of Ada", Los Angeles Chapter of ACM SIGAda, Redondo Beach, CA, May 1987

“Automated Testing of Distributed Ada Tasking Supervisors”, Bell Communications Research, Piscataway, NJ, Apr. 1987

“Automated Testing of Distributed Ada Tasking Supervisors”, IBM T.J. Watson Research Center, Hawthorne, NY, Apr. 1987

“A Distributed Implementation of Ada”, Supercomputing Research Center, Institute for Defense Analyses, Lanham, MD, Apr. 1986

Conference Tutorials

Scalability of Software Systems: Concepts and Techniques, 5th IFIP TC2 Summer School & 2nd ACM/IEEE ICSE 2010 Warm-Up Workshop (WUP 2009), Strand, South Africa, Apr. 2009

Formal Software Engineering (with Alexander L. Wolf), ACM SIGSOFT '95 Third Symp. Foundations of Software Engineering, Washington, DC, USA, Oct. 1995

Formal Software Engineering (with Alexander L. Wolf), ACM SIGSOFT '94 Second Symp. Foundations of Software Engineering, New Orleans, LA, USA, Dec. 1994

Other Conference Presentations

Int'l Conf. Software Engineering (ICSE): 1992, 1994, 2007

ACM SIGSOFT '96 Fourth Symp. Foundations of Software Engineering (FSE): 1996

SIGSOFT '89: 3rd Symp. Software Testing, Analysis and Verification (TAV): 1989

IEEE Computer Society 1984 Conf. Ada Applications and Environments (AAE): 1984

Conference and Workshop Committees

Steering Committees

Int'l Conf. Software Engineering (ICSE), 2001–2007, 2009–present (Chair 2004–2007)

Int'l Symp. Software Testing and Analysis (ISSTA), 2005–2014 (Chair 2007–2008)

European Joint Conf. Theory and Practice of Software (ETAPS), 2008–2011

Int'l Workshop and Conf. Distributed Event-Based Systems (DEBS), 2006–2009

Int'l Conf. Model Driven Engineering Languages and Systems (MoDELS/UML), 2005–2009

European Software Engineering Conf. (ESEC), 2005–2009

Workshop on Program Analysis for Software Tools and Engineering (PASTE), 2005–2009

Int'l Workshop on Software and Performance (WOSP), 2005–2009

Int'l Symp. Automated and Analysis-Driven Debugging (AADEBUG), 2005–2006

Conference General Chair

2007 Int'l Symp. Software Testing and Analysis (ISSTA 2007)

Program or Track Chair/Co-Chair of International Events

50th Anniversary of Software Engineering, 40th Int'l Conf. Software Engineering (ICSE 2018)

Technical Briefings, 39th Int'l Conf. Software Engineering (ICSE 2017)

Visions of 2025 and Beyond Track, 38th Int'l Conf. Software Engineering (ICSE 2016)

ICSE 2004 Most Influential Paper, 36th Int'l Conf. Software Engineering (ICSE 2014)

ICSE 2013 Int'l Workshop on the Engineering of Mobile-Enabled Systems (MOBS 2013)

ETAPS 2010 13th Int'l Conf. Fundamental Approaches to Software Engineering (FASE 2010)

State-of-the-Art Presentations, Joint 11th European Software Engineering Conf. and 15th ACM SIGSOFT

Int'l Symp. Foundations of Software Engineering (ESEC/FSE 2007)

Doctoral Symposium, 29th Int'l Conf. Software Engineering (ICSE 2007)

Conference Coordinator, Social Programs, 28th Int'l Conf. Software Engineering (ICSE 2006)

State-of-the-Practice Track, 27th Int'l Conf. Software Engineering (ICSE 2005)

26th Int'l Conf. Software Engineering (ICSE 2004)

ACM SIGSOFT Eighth Int'l Symp. Foundations of Software Engineering (FSE 2000)

Workshop on Evaluating Software Architectural Solutions (WESAS 2000)

Research Demos and Posters, 22nd Int'l Conf. Software Engineering (ICSE 2000)

Publicity, ACM SIGSOFT Sixth Int'l Symp. Foundations of Software Engineering (FSE 1998)

Publicity, 17th Int'l Conf. Software Engineering (ICSE 1995)

Program Committee Member (Series)

Int'l Conf. Software Engineering (ICSE): 1997, 2000, 2001, 2002, 2003, 2005, 2011, 2012, 2013

SIGSOFT Int'l Symp. Foundations of Software Engineering (FSE): 1998, 2004, 2008, 2010, 2018

European Software Engineering Conf. (ESEC/FSE): 1999, 2001, 2005
SIGSOFT Int'l Symp. Software Testing & Analysis (ISSTA): 1994, 1996, 2004, 2008, 2010
Int'l Workshop/Conf. Distributed Event-Based Systems (DEBS): 2002, 2003, 2004, 2006, 2007
Int'l Conf. Automated Software Engineering (ASE): 1998, 1999
SIGSOFT Symp. Component-Based Software Engineering (CBSE): 2011, 2012

Program Committee Member (Other)

Doctoral Symposium, 43rd Int'l Conf. Software Engineering (ICSE 2021)
New and Emerging Ideas Track, 2018 Int'l Conf. Software Architecture (ICSA 2018)
First International Workshop on Establishing a Community-Wide Infrastructure for Architecture-Based Software Engineering (ECASE 2017)
12th Int'l Symp. Software Engineering for Adaptive and Self-Managing Systems (SEAMS 2017)
Doctoral Symposium, 37th Int'l Conf. Software Engineering (ICSE 2015)
Advisory Committee, 2nd Int'l Conf. Big Data Analytics in Healthcare (BDAH 2014)
First Int'l Conf. Mobile Software Engineering and Systems (MOBILESoft 2014)
Tutorial and Technical Briefings Track, 36th Int'l Conf. Software Engineering (ICSE 2014)
FSE 2012 New Ideas and Emergent Results Track
4th Int'l IEEE Conferences on Software – Science, Technology and Engineering (SwSTE 2010)
2009 Workshop on Architecting Dependable Systems (WADS 2009)
2nd ACM/IEEE ICSE 2010 Warm-Up Workshop (WUP 2009)
FSE 2008 New Software Engineering Faculty Symposium
7th ACM Workshop on Software and Performance (WOSP 2008)
Second Int'l Conf. Tests and Proofs (TAP 2008)
Doctoral Symposium, ACM 2008 Int'l Symp. Software Testing and Analysis (ISSTA 2008)
Doctoral Symposium, 30th Int'l Conf. Software Engineering (ICSE 2008)
ETAPS 2008 11th Int'l Conf. Fundamental Approaches to Software Engineering (FASE 2008)
3rd Int'l IEEE Conferences on Software – Science, Technology and Engineering (SwSTE 2007)
Most Promising New Work Track, 2007 Haifa Verification Conference (HVC 2007)
6th ACM Workshop on Software and Performance (WOSP 2007)
2006 Int'l Symp. Trustworthy Global Computing (TGC 2006)
4th Int'l Workshop on Distributed and Mobile Collaboration (DMC 2006)
Workshop on Web Services—Modeling and Testing (WS-MaTe 2006)
Doctoral Symposium, ACM/IFIP/USENIX 6th Int'l Middleware Conf. (Middleware 2005)
2nd Int'l Workshop on Software Quality (SOQUA 2005)
5th Int'l Workshop on Software Engineering and Middleware (SEM 2005)
Fifth Working IFIP/IEEE Conf. Software Architecture (WICSA 2005)
UML 2004 Workshop on Software Architecture Description and UML
3rd Int'l Workshop on Software Engineering and Middleware (SEM 2002)
2nd Int'l Workshop on Engineering Distributed Objects (EDO 2000)
Doctoral Symposium, 22nd Int'l Conf. Software Engineering (ICSE 2000)
Second USENIX Conf. Domain-Specific Languages (DSL '99)
ICSE '99 Workshop on Engineering Distributed Objects (EDO '99)
First Working IFIP Conf. Software Architecture (WICSA1)
Eighth Annual California Software Symposium (CSS '98)
DEXA '98 Int'l Workshop on Large-Scale Software Composition
ISSTA '98 Second Workshop on Formal Methods in Software Practice
Seventh Annual California Software Symposium (CSS '97)
Second Int'l Workshop on Empirical Studies of Software Maintenance (WESS '97)
ISSTA '96 Workshop on Formal Methods in Software Practice
8th Int'l Workshop on Software Specification and Design (IWSSD-8)
1993 Conf. Computer Software and Applications (COMPSAC '93)
Tutorials, 14th Int'l Conf. Software Engineering (ICSE-14)

Selected Reviewer Service

IEEE Computer Society Fellows Committee
IEEE Senior Member Review Panel (UK and Republic of Ireland Section)
The Royal Society
International Grant Assessments Panel
International Fellowships Panel
Engineering and Physical Sciences Research Council (EPSRC)
Review Panel, Technology Programme, Computer Science, Nov. 2005

Prioritisation Panel, Information and Communications Technology Programme, Jun. 2008
Peer Review College, 2006–2009
National Science Foundation (NSF) Review Panels
Computer and Information Science and Engineering (CISE) Directorate, May 2000
Computer and Information Science and Engineering (CISE) Directorate, Feb. 1997
Vienna Science and Technology Fund (WWTF)
Jury Member, Information and Communication Technology (ICT) Call, 2010

Hosting of Extended Visits by Academics

National University of Singapore

Anthony I. Wasserman, Carnegie Mellon University West, 2014
Carlo Ghezzi, sabbatical leave from Politecnico di Milano, 2014
Mehdi Jazayeri, sabbatical leave from Università della Svizzera Italiana, 2015

University College London

Richard N. Taylor, sabbatical leave from University of California, Irvine, 2005
Sebastian Elbaum, sabbatical leave from University of Nebraska–Lincoln, 2006–2007
Leon J. Osterweil, sabbatical leave from University of Massachusetts–Amherst, 2007
Lori A. Clarke, sabbatical leave from University of Massachusetts–Amherst, 2007

Doctoral and Post-Doctoral Supervision and Examination

In addition to doctoral and post-doctoral supervision, I have supervised individual and group projects, theses and internships for over one hundred Bachelors and Masters Students

Post-Doctoral Supervisor *University of California, Irvine*
Elisabetta Di Nitto, 1998; now Full Professor at Politecnico di Milano

University College London

Arun Mukhija, 2006–2009; now Vendor Governance Lead at Roche, Switzerland
Andrew Dingwall-Smith, 2006–2007; now Senior Developer at Message Automation
Genáina Rodrigues, 2008; now Professora at Universidade de Brasília
Franco Raimondi, 2008–2009; now Professor of Computer Science at Middlesex U.
Sonia Ben Mokhtar, 2009; now Senior Researcher at CNRS

National University of Singapore

Darren Carlson, 2013–2016; now Asst. Professor at U. of Hawai'i at Mānoa
Guoxin Su, 2013–2017; now Lecturer at University of Wollongong
Li Liu, 2013–2016; now Associate Professor at Chongqing University
Omar al-Bataineh, 2018; now Research Fellow at Nanyang Technological U.
Ye Liu, 2018–2019; now Research Engineer at Twitter

Ph.D. Supervisor *University College London*
Jorge Luis Ortega Arjona, 2007; thesis *Architectural Patterns for Parallel Programming—Models for Performance Estimation*; now Professor at Universidad Nacional Autónoma de México, Mexico
Genáina Nunes Rodrigues, 2008; thesis *A Model Driven Approach for Software Reliability Prediction*; now Professora at Universidade de Brasília, Brazil
Ana Leticia De Cerqueira Leite Duboc, 2010; thesis *A Framework for the Characterization and Analysis of Software Systems Scalability*; now Researcher at La Salle – Ramon Llull University, Spain
Costin Raiciu, 2011; thesis *ROAR: Increasing the Flexibility and Performance of Distributed Search*; now Associate Professor at Universitatea Politehnica din Bucuresti, Romania
Michele Sama, 2011; thesis *Context-Driven Methodologies for Context-Aware and Adaptive Systems*; now Vice President of Engineering and Chief Technology Officer at Gluru, UK
Fokion Zervoudakis, 2014; thesis *Cascading Verification: An Integrated Method for Domain-Specific Model Checking*; now Senior Software Engineer at Broadridge Financial Solutions, UK
Panagiotis Papakos, 2014; thesis *Volare Mobile Context-aware Adaptation for the Cloud*; now Software Engineer at RateSetter, UK

National University of Singapore

Ratul Saha, 2018 (co-supervised with P.S. Thiagarajan); thesis *Quantitative Model Checking of Distributed Probabilistic Systems*; now Konductor at GetonChain, Singapore
Yongpo Jia, 2018; thesis *Multi-Source Learning from Social Network Data*; now Data Analytics Research Manager at HeBei Iron & Steel Group (HBIS Group), China
Marc Sven Brünink, 2018; thesis *Analyzing the Behavior of Deployed Software*; now Site Reliability Engineer at Google Zürich, Switzerland
Ye Liu, 2018; thesis *User Attribute Learning from Social Media and Ubiquitous Sensors*; now Senior Research Engineer at Twitter, USA
Yamilet Rosario Serrano Llerena, 2018; thesis *Applications of Perturbation Analysis in Probabilistic Model Checking*; now Assistant Professor at Universidad de Ingeniería y Tecnología, Peru
Nirandika Wanigasekara, 2019; thesis *Decision Models for Context-Aware IoT Applications*; now Data Analyst at IBM Sydney, Australia
Kun Ouyang, 2020; thesis *Human Mobility Analytics with Deep Representations*; now Software Engineer at Shopee, Singapore
Thilina Thanthriwatta, expected 2020

Ph.D. Robert Chatley, Imperial College London, 2005
External Octavian Patrascoiu, University of Kent, 2005
Examiner Ashok Argent-Katwala, Imperial College London, 2006
Alexander Buckley, Imperial College London, 2006
William Heaven, Imperial College London, 2007
Lucio Duarte, Imperial College London, 2007
Gürcan Güleşir, De Universiteit Twente, 2008
Matteo Migliavacca, Politecnico di Milano, 2008
Konstantinos Adamopoulos, M.Phil., King's College London, 2008
Eskinder Asmare, Imperial College London, 2009
Paolo Di Benedetto Università dell'Aquila, 2010
Xiaoyuan Xie, Swinburne University of Technology, 2012

Ph.D. *University of Colorado at Boulder*
Committee Jonathan E. Cook, 1996
Member

University of California, Irvine

Gregory A. Bolcer, 1998
Nenad Medvidovic, 1998
Juei Chang, 1999
David M. Hilbert, 1999
Jason E. Robbins, 1999
Peyman Oreizy, 2000
E. James Whitehead, Jr. , 2000
Roy T. Fielding, 2000
Michael Kantor, 2001
Chang Liu, 2002
Peter Kammer, 2004

Politecnico di Milano

Antonio Carzaniga, 1998

National University of Singapore

Yongzheng Wu, 2012
Jian Zhu, 2012
Marcel Böhme, 2014
Chen Penghe, 2015
Narcisa Andreea Milea, 2015
Limiao Bai, 2016
Zhu Shenggao, 2017
Shin Hwei Tan, 2018
Pin Sym Foong, 2018
Quang Trung Ta, 2018
Shruti Shrikant Tople, 2018

Visiting *University College London*
Ph.D. Javier Cubo, Universidad de Málaga, 2008
Student

Teaching

North Texas State University

IBM System 370 Assembly Language: Fall 1982 (2 sections), Spring 1983 (2 sections)

Rutgers University

Software Engineering: Spring 1996

University of California, Irvine

Software Architectures, Distributed Systems and Interoperability: Spring 1998, Spring 1999, Fall 1999, Fall 2000

Software Engineering: Fall 1998, Winter 2001

Software Testing and Analysis: Spring 1999

Formal Methods in Software Engineering: Spring 1999, Winter 2001

Software Processes: Fall 1997, Winter 2000

Project in System Design: Spring 1998, Fall 1998

Introduction to Software Engineering: Spring 1997

Systematic Software Construction: Winter 1997

Internet-Scale Software Engineering: Fall 1999

Topics in Distributed Object Computing: Spring 1997

Seminar in Software: Fall 1997

University College London

Database and Information Management Systems: 2004–05

Technology Management and Professional Issues: 2004–05, 2005–06, 2006–07, 2007–08, 2008–09, 2009–10, 2010–11

Advanced Analysis and Design: 2005–06, 2006–07, 2007–08, 2008–09, 2009–10, 2010–11

Software Engineering: 2005–06, 2006–07

Architecture and Design of Large-Scale Software Systems: 2006–07, 2007–08, 2008–09

Validation and Verification: 2007–08, 2008–09, 2009–10

National University of Singapore

Automated Software Validation: 2011–12, 2012–13, 2014–15, 2016–17, 2017–18, 2018–19, 2019–20

Software Engineering Project I: 2012–13

Other University Service

University of California, Irvine

Bay Area Round Table (BART), Irvine Research Unit in Software (IRUS) 1997–1998

Representative Assembly, Academic Senate, 1996–1998

Faculty Advisor for Undeclared/Undecided Undergraduate Students, 1997–1999

University Research Park Advisory Committee, 1998–2001

Council on Educational Policy, 1998–1999

Student Discipline Grievance Review Board, Sep. 10, 1997

ICS Department Software Faculty Search Committee, 1998–1999, 2000–2001

ICS Department Graduate Policy Committee, 2000–2001

ICS Department Graduate Policy and Ph.D. Admissions Committee, 1998–1999

ICS Department Graduate Admissions Committee, 1997–1998

ICS Department Undergraduate Policy Committee, 1997–1998

ICS Department Graduate Policy and Admissions Committee, 1996–1997

University College London

UCLse Centre for Systems Engineering, 2005–2011