

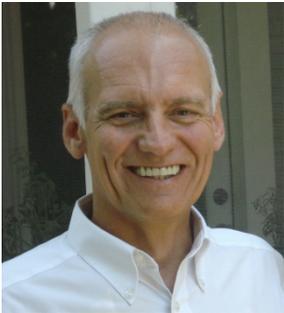


**Convergence of Software Assurance Methodologies and
Trustworthy Semiconductor Design and Manufacture**

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Waterview Conference Center, 1919 N. Lynn St., Arlington, VA

Speakers



Dr. Kevin Kemp manages technology programs at Freescale Semiconductor, including university external research and IP generation. He previously held research and engineering management positions at Motorola, FSI International and the SEMATECH research consortium, where he served as director of Lithography. Dr. Kemp has a Ph.D. in Electrical Engineering from Clemson University, Bachelors and Masters Degrees from the University of Natal in Durban, South Africa, and holds 6 U.S. patents.



Dr. Steve Trimberger is a Xilinx Fellow heading the Circuits and Architectures Group in Xilinx Research Labs in San Jose, California. He designed the bitstream security functions employed by Xilinx FPGAs and his research led to the development of the Xilinx 2.5D Stacked Silicon Technology. He has more than 190 patents in IC design, FPGA and ASIC architecture, CAE and cryptography. His innovations appear today in nearly all commercial FPGA devices. He is a Fellow of the ACM and a Fellow of the IEEE.



Dr. Carl Seger received his M.Sc. in Engineering Physics from Chalmers' University of Technology, Sweden in 1985 and his M.Math and Ph.D. degrees in Computer Science from University of Waterloo, Canada, in 1986 and 1988 respectively. After an academic career at Carnegie Mellon and the University of British Columbia, ending as Associate Professor, he joined Intel in 1995 and is now a Senior Principal Engineer in Design Technology's Formal Verification Center of Expertize. In 2006-2007 Dr. Seger was an Oliver-Smithies Lecturer and a Visiting Fellow at Balliol College, University of Oxford in the UK. Dr. Seger is the author of the Forte (nee Voss) formal verification system and has published more than fifty papers, two books and holds four patents.



Dr. Robert C. Aitken is an ARM Fellow and heads the Silicon portion of ARM R&D. His areas of responsibility include low power design, library architecture for advanced process nodes, and design for manufacturability. His research interests include design for variability, defect analysis, and fault diagnosis. His group has taped out a number of chips, including 4 at or below the 22nm node. He has published over 70 technical papers, on a wide range of topics. Dr. Aitken joined ARM as part of its acquisition of Artisan Components in 2004. Prior to Artisan, he worked at Agilent and HP. He has given tutorials and short courses on several subjects at conferences and universities worldwide. He holds a Ph.D. degree from McGill University in Canada. Dr. Aitken is a senior member of the IEEE, and serves on a number of conference and workshop committees.



Dr. Andrew W. Appel is Eugene Higgins Professor and Chairman of the Department of Computer Science at Princeton University. His research is in computer security, programming languages and compilers, program verification, automated theorem proving, and information-technology policy. He received his A.B. *summa cum laude* in physics from Princeton in 1981, and his PhD in computer science from Carnegie Mellon University in 1985. He has been Editor in Chief of ACM Transactions on Programming Languages and Systems and is a Fellow of the ACM (Association for Computing Machinery).



Dr. David Pichardie is a research scientist at the INRIA research center in Rennes, France. He received a Ph.D. in Computer Science from the University of Rennes, France in 2005 and a Habilitation à diriger les recherches in Computer Science from the ENS Cachan, France in 2012. He joined the INRIA Rennes research center in September 2007. Previously he held a postdoc position at INRIA Sophia-Antipolis under the supervision of Gilles Barthe. In the 2011-13 academic years, he took a sabbatical and visited Jan Vitek's group at Purdue University during the first year and then Greg Morrisett's group at Harvard University during the second year. His research interests include formal methods, programming languages, program verification, software and system security. He is a long time happy user of the Coq proof assistant and the theory of Abstract interpretation. More recently he conducted several research projects about the verified C compiler CompCert.



Dr. Peter Sewell is Professor of Computer Science and an EPSRC Leadership Fellow at the University of Cambridge Computer Laboratory. He held a Royal Society University Research Fellowship from 1999-2007, and took his PhD in Edinburgh in 1995, supervised by Robin Milner. His research aims to build rigorous foundations for the engineering of real-world computer systems, to make them better-understood, more robust, and more secure. Recently, he and his colleagues have focused on the relaxed-memory concurrency models of multiprocessors and concurrent languages (x86, ARM, IBM Power, and C/C++11), on verified compilation of concurrency (CompCertTSO and the concurrency compilation schemes from C/C++11 to x86, Power, and ARM), and on tools for applied semantics. He previously worked on various topics in programming languages, network protocols, security, and concurrency theory.



Dr. Fouad Kiamilev is a professor of Computer Engineering at the University of Delaware. He leads a team of students and colleagues who call themselves CVORG. Our group works on many different and constantly changing technologies. Our active projects include bidirectional electric vehicle chargers (called V2G), 100GHz IC design, infrared scene projection systems, embedded systems, FPGA implementation of lucky region fusion, and hardware hacking. Dr. Kiamilev is proud to be a leading specialist in building unique and singularly successful infrared scene projector systems that makes civilian and military airplanes safer to fly. In the area of electric vehicles, the University of Delaware has three commercial licensees for V2G – an international V2G licensee (NUVVE), a domestic V2G licensee (NRG), and a licensee that will manufacture and market our bidirectional electric vehicle charger (MILBANK). In late 2010, he traveled to Haiti to volunteer at children's camp and medical clinic. And for the past four years, he organized undergraduate student group trips to DEFCON and SHMOOCON hacking conferences. Dr. Kiamilev has graduated 15 Ph.D. students, co-authored 12 patents, 40 journal publications and given over 100 conference talks.



Furkan Cayci is a Ph.D. candidate in the Department of Electrical and Computer Engineering at the University of Delaware. He earned the M.S. in Electrical and Computer Engineering from the University of Delaware in 2010. His research focuses on Embedded Systems Design, Computer and Network Security, Reverse Engineering, Power Analysis and Vehicle to Grid Power.



Dr. Mohammad Tehranipoor is currently the F.L. Castleman Associate Professor in Engineering Innovation at the University of Connecticut. His current research projects include: computer-aided design and test for CMOS VLSI designs, reliable systems design at nanoscale, and hardware security and trust. Dr. Tehranipoor has published over 175 journal articles and refereed conference papers and has given more than 100 invited talks and keynote addresses since 2006. He has published four books and ten book chapters. He is a recipient of several best paper awards as well as the 2008 *IEEE Computer Society (CS) Meritorious Service Award*, the 2012 *IEEE CS Outstanding Contribution*, the 2009 *NSF CAREER Award*, the 2009 *UConn ECE Research Excellence Award*, and the 2012 *UConn SOE Outstanding Faculty Advisor Award*.

He serves on the program committee of more than a dozen of leading conferences and workshops. He served as *Program Chair* of the 2007 IEEE Defect-Based Testing (DBT) workshop, *Program Chair* of the 2008 IEEE Defect and Data Driven Testing (D3T) workshop, *Coprogram Chair* of the 2008 International Symposium on Defect and Fault Tolerance in VLSI Systems (DFTS), *General Chair* for D3T-2009 and DFTS-2009, and *Vice-general Chair* for NATW-2011. He co-founded a new symposium called IEEE International Symposium on Hardware-Oriented Security and Trust (HOST) and served as HOST-2008 and HOST-2009 *General Chair* and *Chair of Steering Committee*. He is currently serving as an *Associate EIC* for IEEE Design & Test, an *Associate Editor* for JETTA, an *Associate Editor* for Journal of Low Power Electronics (JOLPE), an *IEEE Distinguished Speaker*, and an *ACM Distinguished Speaker*. Dr. Tehranipoor is a Senior Member of the IEEE and Member of ACM and ACM SIGDA.



Dr. Steve Zdancewic is an associate professor in the Computer and Information Science department at the University of Pennsylvania in Philadelphia, PA. He received his Ph.D. in Computer Science from Cornell University in 2002, and he graduated from Carnegie Mellon University with a B.S. in Computer Science and Mathematics in 1996. He is the recipient of an NSF Graduate Research Fellowship, an Intel fellowship, an NSF CAREER award, and a Sloan Fellowship. Dr. Zdancewic studies programming languages and computer security.