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Computer Science  
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## Objective

Research and teaching in the areas of computer science with emphasis on embedded systems.

## Education

- Ph.D., Computer Science, University of California, Riverside, 2001.
- B.S., Computer Science, University of California, Riverside, 1997.

## Experience

- Associate Professor, Department of Computer Science, University of California, Irvine, 2007-present.
- Assistant Professor, Department of Computer Science, University of California, Irvine, 2001-2007.

## Member

- Center for Embedded Computer Systems (CECS) at University of California, Irvine.
- Center for Pervasive Communications and Computing (CPCC) at University of California, Irvine.
- Institute of Electrical and Electronics Engineers (IEEE).
- Association for Computing Machinery (ACM).
- Special Interest Group on Design Automation Executive Committee (SIGDA).

## Service

### Program Committee Chair

- International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), 2010 (Co-Chair).
- IFIP Workshop on Software Technologies for Future Embedded & Ubiquitous Systems (SEUS), 2008 (Co-Chair).
- Special Interest Group on Design Automation (SIGDA) Ph.D. Forum at Design Automation Conference (DAC), 2007 (Chair).
- Special Interest Group on Design Automation (SIGDA) Technical Committee on System Design, 2006 (Co-Chair).
- Special Interest Group on Design Automation (SIGDA) Ph.D. Forum at Design Automation Conference (DAC), 2006 (Co-Chair).

## Technical Program Committee Member

- International Conference on Compilers, Architecture, and Synthesis for Embedded Systems (CASES), 2009-present.
- International Symposium on Low Power Electronics and Design (ISLPED), 2007-present.
- International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), 2003-present.
- Special Interest Group on Design Automation (SIGDA) Ph.D. Forum at Design Automation Conference (DAC), 2005-2008.
- International Conference on Embedded Software and Systems (ICCESS), 2008.
- International Workshop on Embedded Single and Multicore Systems on Chips (MCSoc), 2007.
- International Workshop on Embedded Software Optimization (ESO), 2006.
- International Workshop on Logic and Synthesis (IWLS), 2004-2006.
- International Workshop on SoC and MCSoc Design (SoC), 2006.
- International Workshop on Embedded Computing (EC), 2006.
- International Conference on Embedded And Ubiquitous Computing (EUC), 2005.
- International Conference on Compilers, Architecture, and Synthesis for Embedded Systems (CASES), 2005.
- International Conference on Computer Aided Design (ICCAD), 2003, 2004, 2005.
- Asia and South Pacific Design Automation Conference (ASP-DAC), 2003.
- International Workshop on Embedded System Codesign (ESCODES), 2002.

## Topic Chair

- Embedded Software: International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), 2006.
- Micro-Architecture and Memory Optimizations: International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), 2005.
- System-Level Optimization: International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), 2004.

## Special Sessions Chair

- International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), 2005.

## Session Chair

- International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), 2009.
- International Conference on Architecture, Compilers, and Synthesis for Embedded Systems (CASES), 2009.
- Design Automation Conference (DAC), 2009.
- Design Automation Conference (DAC), 2008.
- Design Automation and Test in Europe (DATE), 2008.
- Design Automation Conference (DAC), 2007.
- International Conference on Architecture, Compilers, and Synthesis for Embedded Systems (CASES), 2005.
- International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), 2005.
- International Symposium on Low Power Electronics and Design (ISLPED), 2005.
- International Conference on Computer Aided Design (ICCAD), 2005.
- International Conference on Computer Aided Design (ICCAD), 2004.
- International Conference on Computer Aided Design (ICCAD), 2003.
- International Workshop on Hardware/Software Codesign (CODES), 2002.
- International Workshop on Embedded System Codesign (ESCODES), 2002.
- International Conference on Computer Aided Design (ICCAD), 2001.

## Conference Organizer

- Finance Chair, Embedded Systems Week (ESWEEK), 2008.
- Finance Chair, International Symposium on Low Power Electronics and Design (ISLPED), 2007.
- Student Travel Grants Chair, International Conference on Supercomputing (ICS), 2006.
- Web Chair, International Symposium on Low Power Electronics and Design (ISLPED), 2006.
- Audio Visual Chair, International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), 2006.
- Finance Chair, Special Interest Group on Design Automation (SIGDA) Ph.D. Forum at Design Automation Conference (DAC), 2005.
- Publicity Chair, International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), 2004.
- Poster Committee Chair, Southern California Embedded Systems Symposium (SCESS), 2003.
- Local Chair and Treasurer, International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), 2003.
- Local Chair, International Workshop on Languages, Compilers, and Tools for Embedded Systems (LCTES), 2003.
- Finance and Registration Co-Chair, International Symposium on High Performance Computer Architecture (HPCA), 2003.

## Editorial Board

- Associate Editor, ACM Transactions on Embedded Computing Systems (TECS), 2008-present.
- Associate Editor, ACM SIGDA Bimonthly Newsletter, 2005-2007.
- Guest Editor, International Journal of Parallel Programming (IJPP), 2007.
- Guest Editor, International Journal of Parallel Programming (IJPP), 2006.
- Associate Editor, Journal of Embedded Computing (JEC), 2004-2006.

## Reviewer & Panelist

- National Science Foundation (NSF).
- Kentucky Science & Engineering Foundation (KSEF).
- University of California Microelectronics Innovation and Computer Research Opportunities (UC-MICRO).
- Council of Physical Sciences of the Netherlands Organization for Scientific Research (NWO).
- IEEE Computer.
- IEEE Transactions on Computers (TC).
- IEEE Transactions on Computer Aided Design (TCAD).
- IEEE Transactions on Very Large Scale Integration Systems (TVLSI).
- IEEE Transactions on Design & Test of Computers (TD&T).
- IEEE Transactions on Circuits and Systems II (TCAS-II).
- ACM Transactions on Embedded Computing Systems (TECS).
- ACM Transactions on Design Automation of Electronic Systems (TODAES).
- IEE Proceedings - Computers and Digital Techniques (IEE-C&DT).
- Springer Design Automation for Embedded Systems (SDAES).
- Cluwer Design Automation for Embedded Systems (CDAES).
- Elsevier Journal of Microprocessors and Microsystems (MICPRO).
- Elsevier Journal of System Architecture (JSA).
- Asia and South Pacific Design Automation Conference (ASP-DAC).
- Design Automation Conference (DAC).
- International Conference on Computer Aided Design (ICCAD).
- International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS).
- International Symposium on Micro-architecture (MICRO).
- International Workshop on Compilers, Architecture, and Synthesis for Embedded Systems (CASES).
- International Workshop on Logic and Synthesis (IWLS).

## University

- Member, University Committee on Computing and Communications (UCCC), 2007-present.

## Campus

- Member, Council on Research, Computing and Library Resources (CORCLR), 2007-present.
- Chair, Faculty Board for Undecided/Undeclared Students: A Board of the Council on Educational Policy, 2003-2007.
- Ex Officio Member, Council on Educational Policy, 2003-2007.

## School

- Chair, Computing & Network Policy, 2009-2010.
- Member, Computing & Network Policy, 2008-2009.
- Member, CS&E Steering Committee, 2003-2006.
- Member, DARPA Grand Challenge Team eXtreme Anteater Racers (XAR) Group, 2004-2005.
- Member, Entrepreneurship Committee, 2004-2005.
- Member, Executive Committee, 2003-2004.
- Member, Transition Committee, 2003-2004.
- Member, Faculty Recruit Committee (Ubiquitous Computing), 2003-2004.
- Member, Faculty Recruit Committee (Embedded Systems), 2002-2003.
- Member, CS Degree Program Committee, 2002-2003.
- Member, Graduate Recruit & Admissions Committee, 2002-2003.
- Member, CS&E Degree Program Committee, 2001-2002.

## Awards

- NSF Grant (#0837124), National Science Foundation, 2009.
- Best Paper, International Conference on Compilers, Architecture, and Synthesis for Embedded Systems (CASES), 2008.
- Research & Travel Award, Council on Research, Computing, and Library Resources (CORCLR), University of California, Irvine, 2007.
- NSF Grant (#0749508), National Science Foundation, 2007.
- Faculty Desktop Computing Initiative Award, University of California, Irvine, 2007.
- SIGDA Technical Leadership Award, 2007.
- Best Paper, American Control Conference (ACC), 2006.
- Best Paper, ACM Transactions on Design Automation of Electronic Systems (TODAES), 2006.

- Research & Travel Award, Council on Research, Computing, and Library Resources (CORCLR), University of California, Irvine, 2005.
- Collaborative Research Initiation Award (CRIA), School of Information and Computer Sciences, University of California, Irvine, 2005.
- Chancellor's Award for Excellence in Fostering Undergraduate Research, University of California, Irvine, 2005.
- Research & Travel Grant, School of Information and Computer Sciences, University of California, Irvine, 2004.
- Ted & Janice Smith Faculty Seed Funding Award, 2004.
- Discovery Grant, University of California, 2003.
- Research Grant, Microsoft Corporation & University of California MICRO Matching Funds, 2003.
- Excellence in Teaching Award, Instructional Resource Center/Division of Undergraduate Education, University of California, Irvine, 2003.
- Research & Travel Grant, School of Information and Computer Science, University of California, Irvine, 2003.
- Equipment Donation, Xilinx University Program, 2002.
- NSF ITR Grant, National Science Foundation, 2002.
- Research & Travel Grant, School of Information and Computer Sciences, University of California, Irvine, 2002.
- Equipment Donation, Xilinx University Program, 2001.
- Outstanding Ph.D. Thesis, Department of Computer Science & Engineering, University of California, Riverside, 2001.
- Best Paper, Design Automation and Test in Europe (DATE), 2000.
- GAANN Fellowship, Department of Computer Science & Engineering, University of California, Riverside, 1998.
- Graduate Scholarship, Design Automation Conference, 1998.
- Scholarship, International Council on Systems Engineering Inland Empire, 1997.
- MICRO Fellowship, Department of Computer Science & Engineering, University of California, Riverside, 1997.
- Outstanding Student Award, College of Engineering, University of California, Riverside, 1997.
- Outstanding Academic Program Excellence, Honors Convocations, University of California, Riverside, 1997.

## Presentations

### Invited Talks

- School of Information & Computer Science tek.talk.04, University of California, Irvine, 2004.
- University of California, Irvine Chief Executive Roundtable Retreat, Half-Moon Bay, 2003.
- Southern California Embedded Systems Seminar, Newport, 2002.
- Department of Computer Science & Engineering, University of California, Riverside, 2002.
- School of Information & Computer Sciences, Research Symposium, University of California, Irvine, 2002.
- School of Information & Computer Sciences, University of California Irvine, 2001.
- NEC C&C Research Laboratories, Princeton, 2001.

### Tutorials

- ESL Design: Why the Time is Right and What are the Key Enabling Technologies. IEEE International Conference on Computer Aided Design (ICCAD) 2005.
- New Developments in Embedded System Design: Software for Embedded System. IEEE International Conference on Computer Design (ICCD) 2005.

## Patents

### Issued

- P8.** J. Addink, S. Addink, T. Givargis. Methods and apparatus for using water use signatures and water pressure in improving water use efficiency. United States Patent 7,330,796, February 2008.
- P7.** J. Addink, S. Addink, T. Givargis. Methods and Apparatus for Using Water use Signatures in Improving Water use Efficiency. United States Patent 6,963,808, November 2005.
- P6.** J. Addink, T. Givargis. Interactive Irrigation System. United States Patent 6,950,728, September 2005.
- P5.** J. Addink, K. Buhler, T. Givargis. Modifying Irrigation Schedules of Existing Irrigation Controllers. United States Patent 6,892,114, May 2005.
- P4.** J. Henkel, T. Givargis, F. Vahid. Method for Core-Based System-Level Power Modeling using Object-Oriented Techniques. United States Patent 6,865,526, March 2005.
- P3.** K. Buhler, T. Givargis. Two Tire Irrigation Valve Controller. United States Patent 6,812,826, November 2004.
- P2.** J. Addink, T. Givargis. Detecting Weather Sensor Malfunctions. United States Patent 6,714,134, March 2004.
- P1.** J. Addink, K. Buhler, T. Givargis. Irrigation Accumulation Controller. United States Patent 6,298,285, October 2001.

## Pending

- X.1** A. Nacul, T. Givargis. The Phantom Serializing Compiler. United States Patent Pending, UC Case #2004-686-1.

## Publications

### Book

- B2.** A. Nacul, M. Lajolo, T. Givargis. Interface-Centric Abstraction level for Rapid Hardware/Software Integration, Book Chapter in Applications of Specification And Design Languages for SOCs. Springer, ISBN: 1-4020-4997-8, July 2006.
- B1.** F. Vahid, T. Givargis. Embedded System Design: A Unified Hardware/Software Introduction. John Wiley and Sons, ISBN: 0471386782, October 2001.

### Journal

- J19.** S. Choudhuri, T. Givargis. Deterministic Service Guarantees for NAND Flash using Partial Block Cleaning. Academy Publisher Journal of Software (JSW), vol. 4, no. 7, pp. 728-737, September 2009.
- J18.** M.A. Ghodrat, T. Givargis, A. Nicolau. Optimizing Control Flow in Loops using Interval and Dependence Analysis. Springer Journal on Design Automation of Embedded Systems (DAES), vol. 13, no. 3, pp. 193-221, September 2009.
- J17.** S. Sirowy, D. Sheldon, T. Givargis, F. Vahid. Virtual Microcontrollers. ACM SIGBED Review, vol. 6, no. 1, January 2009.
- J16.** A. Nacul, T. Givargis. Synthesis of Time-Constrained Multitasking Embedded Software. ACM Transactions on Design Automation of Electronic Systems (TODAES), vol. 11, no. 4, pp. 822-847, October 2006.
- J15.** M.A. Ghodrat, T. Givargis, A. Nicolau. Expression Equivalence Checking using Interval Analysis. IEEE Transactions on Very Large Scale Integration Systems (TVLSI), vol. 14, no. 8, pp. 830-842, August 2006.
- J14.** C.V. Lopes, A. Haghighat, A. Mandal, T. Givargis, P. Baldi. Localization of Off-the-Shelf Mobile Devices Using Audible Sound: Architectures, Protocols and Performance Assessment. ACM Mobile Computing and Communications Review (MC2R), vol. 10, no. 2, pp. 38-50, April 2006.
- J13.** T. Givargis. Zero Cost Indexing for Improved Processor Cache Performance. ACM Transactions on Design Automation of Electronic Systems (TODAES), vol. 11, no. 1, pp. 3-25, January 2006. *2006 TODAES Best Paper Award.*
- J12.** T. Givargis, David Eppstein. Memory Reference Caching for Activity Reduction on Address Buses. Elsevier Journal of Microprocessors and Microsystems (MICPRO), vol. 29, no. 4, pp. 145-153, May 2005.
- J11.** A. Ghosh, T. Givargis. Cache Optimization for Embedded Processor Cores: An Analytical Approach. ACM Transactions on Design Automation of Electronic Systems (TODAES), vol. 9, no. 4, pp. 419-440, October 2004.
- J10.** A. Nacul, T. Givargis. Adaptive Cache Management for Low Power Embedded Systems. Korea Multimedia Society, Key Technology of Next Generation IT, ISSN 1229-778X, pp. 30-39, December 2003.

- J9.** T. Givargis, F. Vahid, J. Henkel. Instruction-Based System-level Power Evaluation of System-on-a-Chip Peripheral Cores. *IEEE Transactions on Very Large Scale Integration Systems (TVLSI)*, vol. 10, no. 6, pp. 856-863, December 2002.
- J8.** T. Givargis, F. Vahid, J. Henkel. System-Level Exploration for Pareto-Optimal Configurations in Parameterized System-on-a-Chip. *IEEE Transactions on Very Large Scale Integration Systems (TVLSI)*, vol. 10, no. 4, pp. 416-422, December 2002.
- J7.** T. Givargis, F. Vahid. Platune: A Tuning Framework for System-on-a-Chip Platforms. *IEEE Transactions on Computer Aided Design (TCAD)*, vol. 21, no. 11, pp. 1317-1327, November 2002.
- J6.** F. Vahid, T. Givargis, S. Cotterell. Power Estimator Development for Embedded System Memory Tuning. *Journal of Circuits, Systems, and Computers (JCSC)*, vol. 11, no. 5, pp. 459-476, October 2002.
- J5.** T. Givargis, F. Vahid. Tuning of Cache Ways and Voltage for Low-Energy Embedded System Platforms. *Springer Journal on Design Automation of Embedded Systems*, vol. 7, issue 1-2, pp. 35-51, September 2002.
- J4.** T. Givargis, F. Vahid, J. Henkel. Evaluating Power Consumption of Parameterized Cache and Bus Architectures in System-on-a-Chip Designs. *IEEE Transactions on Very Large Scale Integration Systems (TVLSI)*, vol. 9, no. 4, pp. 500-508, August 2001.
- J3.** F. Vahid, T. Givargis. Platform Tuning for Embedded Systems Design. *IEEE Computer*, vol. 34, no. 3, pp. 112-114, March 2001.
- J2.** J. Farrell, T. Givargis, M. Barth. Real-Time Differential Carrier Phase GPS-Aided INS. *IEEE Transactions on Control Systems Technology (TCST)*, vol. 8, no. 4, pp. 709-721, July 2000.
- J1.** J. Farrell, T. Givargis. Differential GPS Reference Station Algorithm - Design and Analysis. *IEEE Transactions on Control Systems Technology (TCST)*, vol. 8, no. 3, pp. 519-531, May 2000.

## Conference

- C43.** M.A. Ghodrat, T. Givargis. Efficient Dynamic Voltage/Frequency Scaling through Algorithmic Loop Transformation. *International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS)*, pp. 203-209, Grenoble, October 2009.
- C42.** S. Sirowy, F. Vahid, T. Givargis. Digitally-Bypassed Transducers: Interfacing Digital Mockups to Real-Time Medical Equipment. *International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, to appear.
- C41.** A. Ghosh, T. Givargis. Source Routing made Practical in Embedded Networks. *International Conference on Computer Communications and Networks (ICCCN)*, pp. 1-6, San Francisco, August 2009.
- C40.** A. Ghosh, T. Givargis. QoS Routing in Wired Sensor Networks with Partial Updates. *World Academy of Science, Engineering and Technology (WASED)*, pp. 389-393, Oslo, July 2009.
- C39.** S.K. Mylavarapu, S. Choudhuri, A. Shrivastava, J. Lee, T. Givargis. FSAF: File System Aware Flash Translation Layer for NAND Flash Memories. *Design Automation and Test in Europe (DATE)*, pp. 339-344, Dresden, April 2009.
- C38.** S. Choudhuri, T. Givargis. FlashBox: A system for logging non-deterministic events in deployed embedded systems. *International ACM Symposium on Applied Computing (SAC)*, to appear.

- C37.** M.A. Ghodrat, T. Givargis, A. Nicolau. Control Flow Optimization in Loops using Interval Analysis. International Conference on Compilers, Architecture, and Synthesis for Embedded Systems (CASES), pp. 157-166, Atlanta, October 2008. *2008 CASES Best Paper Award.*
- C36.** F. Vahid, T. Givargis. Highly-Cited Ideas in System Codesign and Synthesis. International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), pp. 191-196, Atlanta, October 2008.
- C35.** S. Choudhuri, T. Givargis. Deterministic Service Guarantees for NAND Flash using Partial Block Cleaning. International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), pp. 19-24, Atlanta, October 2008.
- C34.** S. Choudhuri, T. Givargis. Real-Time Access Guarantees for NAND Flash using Partial Block Cleaning. Workshop on Software Technologies for Future Embedded & Ubiquitous Systems (SEUS), pp. 138-149, Italy, September 2008.
- C33.** A. Ghosh, T. Givargis. A Software Architecture for Accessing Data in Sensor Networks. International Conference on Networked Sensing Systems (INSS), pp. 67-70, Japan, June 2008.
- C32.** S. Choudhuri, T. Givargis. Performance Improvement of Block Based NAND Flash Translation Layer. International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS), pp. 257-262, Salzburg, September 2007.
- C31.** M.A. Ghodrat, T. Givargis., A. Nicolau. Short-Circuit Compiler Transformation: Optimizing Conditional Blocks. Asia and South Pacific Design Automation Conference (ASP-DAC), pp. 504-510, Tokyo, January 2007.
- C30.** S. Choudhuri, T. Givargis. System Architecture for Software Peripherals. Asia and South Pacific Design Automation Conference (ASP-DAC), pp. 56-61, Tokyo, January 2007.
- C29.** A. Nacul, T. Givargis. Phantom: A Serializing Compiler for Multitasking Embedded Software. American Control Conference (ACC), pp. 1918-1923, Minneapolis, June 2006. *2006 ACC Best Paper Award.*
- C28.** M.A. Ghodrat, T. Givargis, A. Nicolau. Equivalence Checking of Arithmetic Expressions using Fast Evaluation. International Conference on Compilers, Architecture, and Synthesis for Embedded Systems (CASES), pp. 147-156, San Francisco, September 2005.
- C27.** A. Nacul, T. Givargis. Lightweight Multitasking Support for Embedded Systems using the Phantom Serializing Compiler. Design Automation and Test in Europe (DATE), pp. 742-747, Munich, March 2005.
- C26.** A. Ghosh, T. Givargis. LORD: A Localized, Reactive and Distributed Protocol for Node Scheduling in Wireless Sensor Networks. Design Automation and Test in Europe (DATE), pp. 190-195, Munich, March 2005.
- C25.** A. Mandal, C.V. Lopes, T. Givargis, A. Haghghat, R. Jurdak, P. Baldi. Beep: 3D Indoor Positioning Using Audible Sound. IEEE Consumer Communications and Networking Conference (CCNC), pp. 348-353, Las Vegas, January 2005.
- C24.** A. Nacul, T. Givargis. Code Partitioning for Synthesis of Embedded Applications with Phantom. International Conference on Computer-Aided Design (ICCAD), pp. 190-196, San Jose, November 2004.
- C23.** A. Nacul, T. Givargis. Dynamic Voltage and Cache Reconfiguration for Low Power. Design Automation and Test in Europe (DATE), pp. 1376-1377, Paris, February 2004.

- C22.** M. Buss, T. Givargis, N. Dutt. Exploring Efficient Operating Points for Voltage Scaled Embedded Processor Cores. Real-Time Systems Symposium (RTSS), pp. 275-281, Cancun, December 2003.
- C21.** A. Ghosh, T. Givargis. Cache Optimization for Embedded Processor Cores: An Analytical Approach. International Conference on Computer-Aided Design (ICCAD), pp. 342-347, San Jose, November 2003.
- C20.** T. Givargis. Improved Indexing for Cache Miss Reduction in Embedded Systems. Design Automation Conference (DAC), pp. 872-880, Anaheim, June 2003.
- C19.** A. Ghosh, T. Givargis. Analytical Design Space Exploration of Caches for Embedded Systems. Design Automation and Test in Europe (DATE), pp. 650-655, Munich, March 2003.
- C18.** T. Givargis, D. Eppstein. Reference Caching Using Unit Distance Redundant Codes for Activity Reduction on Address Buses. International Workshop on Embedded System Hardware/Software Codesign (ESCODES), San Jose, September 2002.
- C17.** M. Palesi, T. Givargis. Multi-Objective Design Space Exploration Using Genetic Algorithms. International Workshop on Hardware/Software Codesign (CODES), Estes Park, May 2002.
- C16.** T. Givargis, F. Vahid, J. Henkel. System-Level Exploration for Pareto-Optimal Configurations in Parameterized Systems-on-a-Chip. International Conference on Computer-Aided Design (ICCAD), San Jose, November 2001.
- C15.** T. Givargis, F. Vahid, J. Henkel. Trace-Driven System-Level Power Evaluation of System-on-a-Chip Peripheral Cores. Asia and South Pacific Design Automation Conference (ASP-DAC), Yokohama, January 2001.
- C14.** G. Stitt, F. Vahid, T. Givargis, R. Lysecky. A First-Step Towards an Architecture Tuning Methodology. International Conference on Compilers, Architecture, and Synthesis for Embedded Systems (CASES), San Jose, November 2000.
- C13.** T. Givargis, F. Vahid, J. Henkel. Instruction-Based System-Level Power Evaluation of System-on-a-Chip Peripheral Cores. International Symposium on System Synthesis (ISSS), Madrid, September 2000.
- C12.** R. Lysecky, F. Vahid, T. Givargis. Experiments with the Peripheral Virtual Component Interface. International Symposium on System Synthesis (ISSS), Madrid, September 2000.
- C11.** T. Givargis, F. Vahid. Parameterized System Design. International Workshop on Hardware/Software Codesign (CODES), San Diego, May 2000.
- C10.** T. Givargis, F. Vahid, J. Henkel. Fast Cache and Bus Power Estimation for Parameterized System-on-a-Chip Design. Design Automation and Test in Europe (DATE), Paris, March 2000.
- C9.** R. Lysecky, F. Vahid, T. Givargis. Techniques for Reducing Read Latency of Core Bus Wrappers. Design Automation and Test in Europe (DATE), Paris, March 2000. *2000 DATE Best Paper Award.*
- C8.** T. Givargis, F. Vahid, J. Henkel. A Hybrid Approach for Core-Based System-Level Power Modeling. Asia and South Pacific Design Automation Conference (ASPDAC), Yokohama, January 2000.
- C7.** T. Givargis, J. Henkel, F. Vahid. Interface and Cache Power Exploration for Core-Based Embedded System Design. International Conference on Computer-Aided Design (ICCAD), San Jose, November 1999.
- C6.** R. Lysecky, F. Vahid, T. Givargis, R. Patel. Pre-Fetching for Improved Core Interfacing. International Symposium on System Synthesis (ISSS), San Jose, November 1999.

- C5.** J. Farrell, T. Givargis. Experimental Differential GPS Reference Station Evaluation. American Control Conference (ACC), San Diego, June 1999.
- C4.** J. Farrell, T. Givargis. M. Barth. Differential Carrier Phase GPS-Aided INS for Automotive Applications. American Control Conference (ACC), San Diego, June 1999.
- C3.** F. Vahid, T. Givargis. The Case for a Configure-and-Execute Paradigm. International Workshop on Hardware/Software Codesign (CODES), Rome, May 1999.
- C2.** F. Vahid, T. Givargis. Incorporating Cores into System-Level Specification. International Symposium on System Synthesis (ISSS), Hsinchu, December 1998.
- C1.** T. Givargis, F. Vahid. Interface Exploration for Reduced Power in Core-Based Systems. International Symposium on System Synthesis (ISSS), Hsinchu, December 1998.

## Workshop

- W3.** S. Sirowy, D. Sheldon, T. Givargis, F. Vahid. Virtual Microcontrollers. Workshop on embedded system education (WESE), Atlanta, October 2008.
- W2.** A. Nacul, M. Lajolo, T. Givargis. Interface-Centric Abstraction Level for Rapid Hardware/Software Integration. Forum on Specification and Design Languages (FDL), Lausanne, September 2005.
- W1.** A. Haghighat, C. Lopes, T. Givargis, and A. Mandal. Location-Aware Web System. Workshop on Building Software for Pervasive Computing at the Object-Oriented Programming, Systems, Languages and Applications (OOPSLA) Conference, Vancouver, October 2004.

## Affiliated Students

### Ph.D. Final Defense Committee Chair

- Mohammad Ali Ghodrat, Department of Computer Science, University of California, Irvine, 9/1/2009.
- Siddharth Choudhuri, Department of Computer Science, University of California, Irvine, 1/5/2009.
- Arijit Ghosh, Department of Computer Science, University of California, Irvine, 07/09/2008.
- Andre Nacul, Department of Computer Science, University of California, Irvine, 04/23/2007.

### Ph.D. Final Defense Committee Member

- Babak Salamat, Department of Computer Science, University of California, Irvine, 06/8/2009.
- Aseem Gupta, Department of Electrical Engineering & Computer Science, University of California, Irvine, 05/29/2009.
- Gabor Madl, Department of Computer Science, University of California, Irvine, 05/27/2009.
- Love Singhal, Department of Computer Science, University of California, Irvine, 01/13/2009.
- Lei Zhou, Department of Electrical Engineering & Computer Science, University of California, Irvine, 12/03/2008.
- Seung-Eun Lee, Department of Electrical Engineering & Computer Science, University of California, Irvine, 12/03/2008.
- Minyoung Kim, Department of Computer Science, University of California, Irvine, 7/8/2008.

- Jun Ho Bahn, Department of Electrical Engineering & Computer Science, University of California, Irvine, 12/20/2007.
- Daniel Jesus Valencia Sanchez, Department of Computer Science, University of California, Irvine, 09/10/2007.
- Chen Liu, Department of Electrical Engineering & Computer Science, University of California, Irvine, 08/03/07.
- Vasanth Venkatachalam, Department of Computer Science, University of California, Irvine, 5/14/2007.
- Ning Wang, Department of Computer Science, University of California, Irvine, 5/14/2007.
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