

Curriculum Vitae

Aleksandar MILENKOVIĆ

Electrical and Computer Engineering Department
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Research Interests

Computer architecture, embedded systems, high-performance computing systems, performance evaluation, energy-efficient computing, secure processors, mHealth systems and applications, wireless sensor networks, reconfigurable computing, and VLSI.

Education

- 10/1999** **Ph.D.** in Computer Engineering and Science, **The University of Belgrade** Belgrade, Serbia
Dissertation title: Cache injection in bus-based shared memory multiprocessors
Advisor: Prof. Veljko Milutinovic
- 2/1997** **M.Sc.** in Computer Engineering and Science, **The University of Belgrade** Belgrade, Serbia
Thesis title: A quantitative analysis of wiring lengths in
2D and 3D VLSI implementations of 3D systolic arrays
Advisor: Prof. Veljko Milutinovic
GPA: 10/10
- 4/1994** **Dipl. Ing.** in Electrical Engineering, **The University of Belgrade** Belgrade, Serbia
Project: Design of an HDL based simulator for processor i960KB
GPA: 9.45/10

Work Experience

- 08/14 – present** Professor of Electrical and Computer Engineering
The University of Alabama in Huntsville Huntsville, AL
- 05/07 – 08/14** Associate Professor of Electrical and Computer Engineering
The University of Alabama in Huntsville Huntsville, AL
- 08/01 – 05/07** Assistant Professor of Electrical and Computer Engineering
The University of Alabama in Huntsville Huntsville, AL
- 12/00 – 08/01** Assistant Professor
School of Computing, Dublin City University Dublin, Ireland
- 05/00 – 12/00** Assistant Professor
School of Electrical Engineering, The University of Belgrade Belgrade, Serbia
- 10/94 – 05/00** Research/Teaching Assistant
School of Electrical Engineering, The University of Belgrade Belgrade, Serbia

Research

The University of Alabama in Huntsville Huntsville, AL
Laboratory for Advanced Computer Architectures and Systems (LaCASA), Founder, Directing research
Web: <http://lacasa.uah.edu>

mHealth: Computing infrastructure for mobile health and wellness monitoring, Co-founder, Directing research
 Web: <http://portal.mhealth.uah.edu>

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| 06/18 – present | Exploiting physical properties of flash memory chips for security enhancements and energy-efficiency |
| 06/17 – 06/18 | Flash memory based True Random Number generators |
| 04/15 – present | Hardware supported security enhancements in cyber-physical systems |
| 08/12 – present | Energy-efficiency in modern computing systems <i>Evaluating impact of frequency scaling in high-end processors</i> <i>Energy-efficient in mobile computing platforms (developed a setup for measurement-based profiling of smartphone applications; developed analytical models for file data file uploads and downloads, developed environment of optimizing data transfers utilizing compression utilities).</i> |
| 08/12 – present | mHealth – Computing Infrastructure for Mobile Health and Wellness Monitoring <i>Developing new wearable systems for mobility assessment (e.g., Smart Button)</i> <i>Developing new algorithms for characterization of medical tests for mobility assessment (e.g., Smart Time-Up-Go Test, Smart 30-seconds Chair Stand Test, and others)</i> |
| 08/08 – present | Tracing and Debugging in Embedded Systems <i>Developed new techniques for program tracing and debugging in embedded systems</i> <i>Developed new techniques for program tracing in multicores</i> |
| 08/03 – 06/10 | Secure processors <i>Developed new architectural extensions to counter software and physical attacks</i> <i>Developed hardware/software mechanisms for supporting code and data integrity and confidentiality</i> |
| 08/04 – 08/11 | Wireless sensor networks <i>TinyHMS: Tiny wireless sensors for health monitoring (co-lead with Dr. Jovanov)</i> <i>Energy efficiency in wireless distributed sensor networks (co-lead with Dr. Raskovic, Dr. Jovanov)</i> <i>Reconfigurable wireless sensor platforms, IP cores for security, error correction, DSP</i> |
| 08/02 – present | Techniques for Architecture Exploration (Simulation, Measurement, Performance Analysis) |
| 08/02 – 08/04 | Architectural analysis using on-chip performance monitoring registers and microbenchmarks |
| 05/02 – 08/03 | Cache replacement policies in high-performance and embedded processors |
| The University of Belgrade Belgrade, Serbia | |
| 01/97 – 12/99 | Techniques for tolerating memory latency in SMPs (cache injection, data forwarding, prefetching) |
| 01/98 – 12/98 | Multiprocessor simulation (led development of trace-driven simulator Limes) |
| 10/94 – 10/96 | Cache coherence protocols in SMPs/DSMs (Lead: Prof. V. Milutinovic) |
| 10/94 – 03/97 | Potentials of 3D VLSI |

Publications

P. Patents

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|-----------------|--|
| P#2. [USPTO'17] | Emil Jovanov, Aleksandar Milenković , Mladen Milosevic, "Systems and methods for automatically quantifying mobility," USPTO #9,706,949, issued: July 18, 2017, https://patents.google.com/patent/US9706949B2/en . |
| P#1. [USPTO'09] | Frank E. Levine, Aleksandar Milenković , Milena Milenković, "Data and Instruction Address Compression," USPTO #7,496,902, issued on February 24, 2009 (filed March 2005). |

A. Patent Applications

- A#1. [USPTO'17]** Biswajit Ray, **Aleksandar Milenković**, "True Random Number Generation Using Read Noise of Flash Memory," Patent Application, UAH-P-17022, September 2017.
- A#2. [USPTO'19]** David Coe, Jeff Kulick, Aleksandar Milenkovic, Letha Etzkorn, "Methods for Virtualized in Situ Hardware-in-the-Loop Verification of Cyber-Physical System Software Updates," Patent Application, UAH-P-18021, September 2018.

PA. Provisional Patent Applications/UAH Disclosure

- PPA#1. [UAH-DISC'13]** **Aleksandar Milenković**, Mladen Milosevic, Emil Jovanov, "Smartphone Instrumentation and Monitoring of Wheelchairs and Wheeled Apparatuses," Provisional patent applications UAH-0117, January 2013.

J. Refereed Journal Articles

The University of Alabama in Huntsville Huntsville, AL

- J#32. [IEEE.TED'20b]** Sadman Sakib, Aleksandar Milenković, Biswajit Ray, "Flash Watermark: An Anticounterfeiting Technique for NAND Flash Memories," *IEEE Transactions on Electron Devices*, Vol. 67, Issue: 3, pp. 937-943, August 2020, doi: 10.1109/TED.2020.3015451
- J#31. [IEEE.TED'20]** Sadman Sakib, Aleksandar Milenković, Md Tauhidur Rahman, Biswajit Ray, "**An Aging-Resistant NAND Flash Memory Physical Unclonable Function**," *IEEE Transactions on Electron Devices*, Vol. 67, Issue: 3, pp. 937-943, February 2020, doi: 10.1109/TED.2020.2968272.
- J#30. [IEEE.MVT'20]** David Coe, Jeff Kulick, Aleksandar Milenković, Letha Etzkorn, "**Virtualized In-Situ Software Update Verification: Verification of Over-the-Air Automotive Software Updates**," *IEEE Vehicular Technology Magazine*, Vol. 15, Issue: 1, March 2020, pp. 84-90, doi: 10.1109/MVT.2019.2954302.
- J#29. [ACM.TECS'19]** Mounika Ponugoti, Aleksandar Milenković, "**Enabling On-the-Fly Hardware Tracing of Data Reads in Multicores**," *ACM Transactions on Embedded Computing Systems*, Vol. 18, No. 34, pp. 1-27, June 2019, DOI: <https://doi.org/10.1145/3322642>.
- J#28. [IEEE.TC'19]** Prawar Poudel, Biswajit Ray, Aleksandar Milenković, "**Microcontroller TRNGs Using Perturbed States of NOR Flash Memory Cells**," *IEEE Transactions on Computers*, Vol. 68, No. 2, Feb. 2019, pp. 307-313, DOI: 10.1109/TC.2018.2866459.
- J#27. [IEEE.TED'18]** Biswajit Ray, **Aleksandar Milenković**, "True Random Number Generation Using Read Noise of Flash Memory Cells," *IEEE Transactions on Electron Devices*, Vol. 65, Issue 3, March 2018, pp. 963-969, DOI: 10.1109/TED.2018.2792436.
- J#26. [Elsevier. Measurement'16]** Armen Dzhagaryan, **Aleksandar Milenković**, Emil Jovanov, Mladen Milosevic, "An Environment for automated measurement of energy consumed by mobile and embedded computing devices," *Measurement*, Vol. 94, December 2016, pp. 103-118, DOI: 10.1016/j.measurement.2016.07.073.
- J#25. [MDPI.Information'16]** Priyanka Madushri, Armen Dzhagaryan, Emil Jovanov, **Aleksandar Milenković**, "An mHealth Tool Suite for Mobility Assessment," *Information*, Vol. 7, No. 3, July 2016, DOI: 10.3390/info7030047.
- J#24. [Elsevier.JSA'15]** Amrith K. Tewar, Albert R. Myers, **Aleksandar Milenković**, "mcfTRaptor: Toward unobtrusive on-the-fly control-flow tracing in multicores," *Journal of Systems Architecture*, Vol. 61, No. 10, November 2015, pp. 601-614, DOI: 10.1016/j.sysarc.2015.07.005.
- J#23. [IEEE.TC'14]** Vladimir Uzelac, **Aleksandar Milenković**, Milena Milenković, Martin Burtscher, "Using Branch Predictors and Variable Encoding for On-the-fly Program Tracing," *IEEE Transactions on Computers*, Vol. 63, No. 4, April 2014, pp. 1008-1020, DOI: 10.1109/TC.2012.267.
- J#22. [ACM.TECS'13]** Vladimir Uzelac, **Aleksandar Milenković**, "Hardware-Based Load Value Trace Filtering for On-the-Fly Debugging," *ACM Transactions on Embedded Computing Systems*, Vol. 12, No. 2s, May 2013, DOI: 10.1145/2465787.2465799.

- J#21.**
[Springer.JMS'11] Emil Jovanov, **Aleksandar Milenković**, "Body Area Networks for Ubiquitous Healthcare Applications: Opportunities and Challenges," *Journal of Medical Systems*, Vol. 35, No. 5, October 2011, pp. 1245-1254, DOI: 10.1007/s10916-011-9661-x.
- J#20.**
[IEEE.TC'11] **Aleksandar Milenković**, Vladimir Uzelac, Milena Milenković, Martin Burtcher "Caches and Predictors for Real-time, Unobtrusive, and Cost-Effective Program Tracing in Embedded Systems," *IEEE Transactions on Computers*, Vol. 60, No. 7, July 2011, pp. 992-1005. DOI: 10.1109/TC.2010.146.
- J#19.**
[IEEE.TCASI'10] Ashkan Ashrafi, Reza Adhami, **Aleksandar Milenković**, "A Direct Digital Frequency Synthesizer Based on the Quasi Linear Interpolation Method," *IEEE Transactions on Circuits and Systems I*, Vol. 57, Issue 4, April 2010, pp. 863-872, DOI: 10.1109/TCSI.2009.2027645.
- J#18.**
[Elsevier.MICPRO'09] Austin Rogers, **Aleksandar Milenković**, "Security extensions for integrity and confidentiality in embedded processors," *Microprocessors and Microsystems*, Vol. 33, Issues 5-6, August 2009, pp. 333-414, DOI: 10.1016/j.micpro.2009.06.002.
- J#17.**
[Wiley.CAEE'08] Jovan Djordjevic, Bosko Nikolic, Tanja Borozan, **Aleksandar Milenković**, "CAL2: Computer Aided Learning in Computer Architecture Laboratory," *Computer Applications in Engineering Education*, Vol. 16, Issue 3, 2008, pp. 172-188, DOI: 10.1002/cae.20141.
- J#16.**
[ACM.TOMACS'07] **Aleksandar Milenković**, Milena Milenković, "An Efficient Single-Pass Trace Compression Technique Utilizing Instruction Streams," Vol. 17, Issue 1, *ACM Transactions on Modeling and Computer Simulation*, January 2007, ACM Press, pp. 1-27, DOI: 10.1145/1189756.1189758.
- J#15.**
[Elsevier.COMPCOMM'06] **Aleksandar Milenković**, Chris Otto, Emil Jovanov, "Wireless Sensor Networks for Personal Health Monitoring: Issues and an Implementation," *Computer Communications (Special issue: Wireless Sensor Networks: Performance, Reliability, Security, and Beyond)*, Vol. 29, No. 13-14, Elsevier, 2006, pp. 2521-2533, DOI: 10.1016/j.comcom.2006.02.011.
- J#14.**
[IOS.JEC'06] **Aleksandar Milenković**, Milena Milenković, Emil Jovanov, "An Efficient Runtime Instruction Block Verification for Secure Embedded Systems," *Journal of Embedded Computing*, Vol. 2, No. 1, IOS Press, Amsterdam, The Netherlands, September 2006, pp. 57-76.
- J#13.**
[Rinton.JMM'06] Chris Otto, **Aleksandar Milenković**, Corey Sanders, Emil Jovanov, "System Architecture of a Wireless Body Area Sensor Network for Ubiquitous Health Monitoring," *Journal of Mobile Multimedia*, Vol. 1, No. 4, 2006, pp. 307-326.
- J#12.**
[IEEE.TE'05] Jovan Djordjevic, Bosko Nikolic, **Aleksandar Milenković**, "Flexible Web-based Educational System for Teaching Computer Architecture and Organization," *IEEE Transactions on Education*, Vol. 48, No. 2, 2005, pp. 264-273, DOI: 10.1109/TE.2004.842918.
- J#11.**
[ACM.CAN'05] Milena Milenković, **Aleksandar Milenković**, Emil Jovanov, "Using Instruction Block Signatures to Counter Code Injection Attacks," *Computer Architecture News*, Vol. 33, No. 1, March 2005, pp. 108-117, DOI: 10.1145/1055626.1055641.
- J#10.**
[BioMED.JNER'05] Emil Jovanov, **Aleksandar Milenković**, Chris Otto, Piet C. de Groen, "A Wireless Body Area Network of Intelligent Motion Sensors for Computer Assisted Physical Rehabilitation," *Journal of NeuroEngineering and Rehabilitation*, 2:6, March 1, 2005, DOI: 10.1186/1743-0003-2-6. [<http://www.jneuroengrehab.com/content/2/1/6>]
- J#9.**
[Wiley.SPE'04] Milena Milenković, **Aleksandar Milenković**, Jeffrey Kulick, "Microbenchmarks for Determining Branch Predictor Organization," *Software Practice & Experience*, Vol. 34, No. 4, April 2004, pp. 465-487, DOI: 10.1002/spe.v34:5.
- J#8.**
[IEEE.CAL'03] **Aleksandar Milenković**, Milena Milenković, "Stream-Based Trace Compression," *Computer Architecture Letters*, Vol. 2, Sep. 2003, DOI: 10.1109/L-CA.2003.7.
- J#7.**
[Elsevier.MICPRO'02] **Aleksandar Milenković**, Veljko M. Milutinovic "A Performance Evaluation of Cache Injection in Bus-based Shared Memory Multiprocessors," *Microprocessors and Microsystems*, Vol. 26, No. 2, March 2002, pp. 51-61, DOI: 10.1016/S0141-9331(01)00146-6.

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- J#6.** **Aleksandar Milenković**, "Achieving High Performance in Bus-Based Shared Memory Multiprocessors," *IEEE Concurrency*, Vol. 8, No. 3, July-September 2000, pp. 36-44, DOI: 10.1109/4434.865891.
[IEEE.CONC'00]
- J#5.** Jovan Djordjevic, **Aleksandar Milenković**, and Nenad Grbanovic, "An Integrated Environment for Teaching Computer Architecture," *IEEE Micro*, Vol. 20, No. 3, 2000, pp. 66-74, DOI: 10.1109/40.846311.
[IEEE.MICRO'00]
- J#4.** **Aleksandar Milenković** and Veljko M. Milutinovic, "A Quantitative Analysis of Wiring Lengths in 2D and 3D VLSI," *Microelectronics Journal*, Vol. 29, no. 6, 1998, pp. 313-322, DOI: 10.1016/S0026-2692(97)00043-8.
[Elsevier.MEJ'98]
- J#3.** Salim Lakhani, Y. Wang, **Aleksandar Milenković**, and Veljko M. Milutinovic, "3D Convolution on a 3D Systolic Arrays: Another Point of View," *International Journal of Computers and Applications*, Vol. 19, no. 3, 1997, pp. 130-134.
[IASTED.IJCA'97b]
- J#2.** Salim Lakhani, Veljko M. Milutinovic, **Aleksandar Milenković**, D. Meyer, and Branislava Perunicic, "Stochastic Modeling and Analysis of Propagation Delays in Processing Units," *International Journal of Computers and Applications*, Vol. 19, no. 2, 1997, pp. 61-69.
[IASTED.IJCA'97a]
- J#1.** Salim Lakhani, Y. Wang, **Aleksandar Milenković**, and Veljko M. Milutinovic, "2D Matrix Multiplication on a 3D Systolic Arrays," *Microelectronics Journal*, Vol. 27, no.1, February 1996, pp. 11-22, DOI: 10.1016/0026-2692(95)00008-9.
[Elsevier.MEJ'96]

C. Refereed Conference/Workshop Papers

The University of Alabama in Huntsville Huntsville, AL

- C#75.** Prawar Poudel, Biswajit Ray, and **Aleksandar Milenkovic**, "Flashmark: Watermarking of NOR Flash Memories for Counterfeit Detection," to appear in the *Proceedings of the 58th Design Automation Conference (DAC 2020)*, San Francisco, CA, July 19-23, 2020, 6 pages. doi: TBD (double blind review, acceptance rate: 23%).
[IEEE.DAC'20]
- C#74.** Jason Winningham, David Coe, Jeffrey Kulick, Aleksandar Milenkovic, and Leth Etzkorn "A Single-Board Computing Constellation Supporting Integration of Hands-on Cybersecurity Laboratories into Operating Systems Courses," in the *Proceedings of the National Cyber Summit (NCS) - Research Track 2020*, pp. 78-91, Springer Nature Switzerland, doi: 10.1007/978-3-030-58703-1_5
[Springer.NCS'20]
- C#73.** Prawar Poudel and **Aleksandar Milenkovic**, "Saving Time and Energy Using Partial Flash Memory Operations in Low-Power Microcontrollers," in the *Proceedings of the 21st International Symposium on Quality Electronic Design (ISQED 2020)*, Santa Clara, CA, March 25-26, 2020, 7 pages. doi: TBD.
[IEEE.ISQED'20]
- C#72.** Sadman Sakib, Md Tuhidur Rahman, **Aleksandar Milenkovic**, Biswajit Ray, "Flash Memory Based Physical Unclonable Function," in the *Proceedings of the IEEE Southeast Con*, Huntsville, AL, April 11-14, 2019, 6 pages. doi: 10.1109/SoutheastCon42311.2019.9020567.
[IEEE.SE'19c]
- C#71.** Ranjan Hebbar Seethur Raviraj, Mounika Ponugoti, and **Aleksandar Milenkovic**, "Battle of Compilers: An Experimental Evaluation Using SPEC CPU2017," in the *Proceedings of the IEEE Southeast Con*, Huntsville, AL, April 11-14, 2019, 8 pages. doi: tbd.
[IEEE.SE'19b]
- C#70.** Ranjan Hebbar Seethur Raviraj and **Aleksandar Milenkovic**, "Impact of Thread and Frequency Scaling on Performance and Energy Efficiency: An Evaluation of Core i7-8700K Using SPEC CPU2017," in the *Proceedings of the IEEE Southeast Con*, Huntsville, AL, April 11-14, 2019, 7 pages. doi: tbd.
[IEEE.SE'19a]
- C#69.** Ranjan Hebbar Seethur Raviraj and **Aleksandar Milenkovic**, "SPEC CPU2017: Performance, Event, and Energy Characterization on the Core i7-8700K," in the *Proceedings of the 10-the ACM/SPEC International Conference on Performance Engineering (ICPE 2019)*, Mumbai, India, April 7-11, 2019, 8 pages. DOI: 10.1145/3297663.3310314.
[ACM.ICPE'19]

- C#68.**
[INSTICC.PECCS'18] Armen Dzhagaryan and **Aleksandar Milenkovic**, "On Effectiveness of Compressed File Transfers to/from the Cloud: An Experimental Evaluation," in the *Proceedings of the 8th International Joint Conference on Pervasive and Embedded Computing and Communication Systems (PECCS'18)*, Porto, Portugal, July 29-30, 2018, pp. 35-46. DOI: 10.5220/0006905801730184.
- C#67.**
[IEEE.PIMRC'17] Armen Dzhagaryan and **Aleksandar Milenkovic**, "A Framework for Optimizing File Transfers Between Mobile Devices and the Cloud," in the *Proceedings of the IEEE International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC'17)*, Montreal, Canada, October, 2017, 7 pages. DOI: 10.1109/PIMRC.2017.8292494.
- C#66.**
[IEEE.EMBC'17] Priyanka Madhushri, Emil Jovanov, **Aleksandar Milenkovic**, Yuri Shtessel, "A Model Based Analysis of Optimality of Sit-to-Stand Transition," in the *Proceedings of the 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'17)*, Seogwipo, South Korea, July, 2017, DOI: 10.1109/EMBC.2017.8037339.
- C#65.**
[ACM.SE'16] Ryan Cowart, David Coe, Jeffrey Kulick, and **Aleksandar Milenkovic**, "An Implementation and Experimental Evaluation of Hardware Accelerated Ciphers in All Programmable SoCs," in the *Proceedings of ACM Southeast Conference*, Kennesaw, Georgia USA, April 2017, 8 pages. DOI: <http://dx.doi.org/10.1145/3077286.3077297>.
- C#64.**
[EAI.FABULOUS'16] Valentine Nwachukwu, Emil Jovanov, **Aleksandar Milenkovic**, "An Implementation of an IoT Server for Home Health Monitoring Applications," in the *Proceedings of the 2nd EAI International Conference on Future Access Enablers of Ubiquitous and Intelligent Infrastructures (FABULOUS'16)*, Belgrade, Serbia, October 2016.
- C#63.**
[ACM.ICCD'16] Mounika Ponugoti, **Aleksandar Milenković**, "Exploiting Cache Coherence for Effective On-the-Fly Data Tracing in Multicores," in the *Proceedings of the 2016 International Conference on Computer Design (ICCD'16)*, October 2-5, Scottsdale, AZ, USA, pp. 312-319. DOI: 10.1109/ICCD.2016.7753295
(double blind review, 28% acceptance rate)
- C#62.**
[ACM.CASES'16] Mounika Ponugoti, Amrish K. Tewar, **Aleksandar Milenković**, "On-the-Fly Load Data Value Tracing in Multicores," in the *Proceedings of the International Conference on Compilers, Architectures and Synthesis of Embedded Systems (CASES'16)*, October 2-5, Pittsburgh, PA, USA, pp. 1-10. DOI: 10.1145/2968455.2968507 (double blind review, 28% acceptance rate)
- C#61.**
[IEEE.EMBC'16] Priyanka Madhushri, Armen Dzhagaryan, Emil Jovanov, **Aleksandar Milenkovic**, "A Smartphone Application Suite for Assessing Mobility," in the *Proceedings of the 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'16)*, August 16-20, Orlando, FL, USA. DOI: 10.1109/EMBC.2016.7591389
- C#60.**
[IEEE.ICCCN'16] Armen Dzhagaryan, **Aleksandar Milenković**, "Models for Evaluating Effective Throughputs for File Transfers in Mobile Computing," in the *Proceedings of the IEEE 25th International Conference on Computer Communications and Networks (ICCCN 2016)*, August 01-04, 2016, Waikoloa, Hawaii, USA. DOI: 10.1109/ICCCN.2016.7568547
- C#59.**
[INSTICC.PECCS'16b] Armen Dzhagaryan, **Aleksandar Milenkovic**, "Analytical Models for Evaluating Effectiveness of Compressed File Transfers in Mobile Computing," in the *Proceedings of the 6th International Joint Conference on Pervasive and Embedded Computing and Communications Systems (PECCS'16)*, July 25-27, 2016, Lisbon, Portugal, pp. 40-51. DOI: 10.5220/0005953700400051
- C#58.**
[INSTICC.PECCS'16a] Armen Dzhagaryan, **Aleksandar Milenković**, Emil Jovanov, Mladen Milosevic, "An Environment for Automated Measuring of Energy Consumed by Android Mobile Devices," in the *Proceedings of the 6th International Joint Conference on Pervasive and Embedded Computing and Communications Systems (PECCS'16)*, July 25-27, 2016, Lisbon, Portugal, pp. 28-39. (best student paper award). DOI: 10.5220/0005950800280039
- C#57.**
[ACM.CISRC'16] Reece Johnston, Sun-il Kim, David Coe, Letha Etzkorn, Jeffrey Kulick, and **Aleksandar Milenkovic**, Xen Network Flow Analysis for Intrusion Detection, in the *Proceedings of the 11th Annual Cyber and Information Security Research (CISRC'16)*, April 5-7, 2016, Oak Ridge National Laboratory,

ACM New York, NY, U.S.A. DOI: 10.1145/2897795.2897802.
(acceptance rate: 39%)

- C#56.**
[IEEE.HealthCom'15b] Armen Dzhangaryan, **Aleksandar Milenković**, "On Effectiveness of Lossless Compression in Transferring mHealth Data," in the *Proceedings of the 17th International Conference on E-health, Networking, Application & Services (HealthCom'15)*, October 14-17, 2015, Boston, MA. DOI: 10.1109/HealthCom.2015.7454588
- C#55.**
[IEEE.HealthCom'15a] Armen Dzhangaryan, **Aleksandar Milenković**, Emil Jovanov, Mladen Milosevic, "Smart Button: A Wearable System for Assessing Mobility in Elderly," in the *Proceedings of the 17th International Conference on E-health, Networking, Application & Services (HealthCom'15)*, October 14-17, 2015, Boston, MA. DOI: 10.1109/HealthCom.2015.7454536
- C#54.** [IEEE.ICCCN'15] Armen Dzhangaryan, **Aleksandar Milenković**, Martin Burtscher, "Quantifying Benefits of Lossless Compression Utilities on Modern Smartphones," in *Proceedings of the 24th International Conference on Computer Communications and Networks (IC3N'15)*, August 3-6, Las Vegas, NV. DOI: 10.1109/ICCCN.2015.7288455 (acceptance rate ~25%, **best paper nominee**)
- C#53.**
[ACM.SE'14] Armen Dzhangaryan, **Aleksandar Milenković**, "Impact of Thread and Frequency Scaling on Performance and Energy in Modern Multicores: A Measurement-based Study," in the *Proceedings of the 52nd Annual ACM Southeast Conference (ACMSE'14)*, March 28-29, Kennesaw, GA. DOI: 10.1145/2638404.2638473
- C#52.**
[IEEE.MASCOTS'13] **Aleksandar Milenković**, Armen Dzhangaryan, Martin Burtscher, "Performance and Energy Consumption of Lossless Compression/Decompression Utilities on Mobile Computing Platforms," in the *Proceedings of the IEEE 21st International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS 2013)*, August 14-16, 2013, San Francisco, CA. DOI: 10.1109/MASCOTS.2013.33 (44 out of 163, ~27% acceptance rate).
- C#51.**
[IEEE.EMBC'13] Emil Jovanov, Mladen Milosevic, **Aleksandar Milenković**, "Mobile System for Assessment of Physiological Response to Posture Transitions," in the *Proceedings of the 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'13)*, July 3-7, Osaka, Japan. DOI: 10.1109/EMBC.2013.6611220
- C#50.**
[IEEE.BSN'13b] Mladen Milosevic, Emil Jovanov, **Aleksandar Milenković**, "Quantifying Timed-Up-and-Go Test: A Smartphone Implementation," in the *Proceedings of the 10th Annual Body Sensor Networks Conference 2013 (BSN'13)*, May 6-9, Boston, MA, pp. 302-307. DOI: 10.1109/BSN.2013.6575478
- C#49.**
[IEEE.BSN'13a] **Aleksandar Milenković**, Mladen Milosevic, Emil Jovanov, "Smartphones for Smart Wheelchairs," in the *Proceedings of the 10th Annual Body Sensor Networks Conference 2013 (BSN'13)*, May 6-9, Boston, MA, pp. 404-409. DOI: 10.1109/BSN.2013.6575460
- C#48.**
[IEEE.ISPASS'13] Armen Dzhangaryan, **Aleksandar Milenković**, Martin Burtscher, "Energy Efficiency of Lossless Data Compression on a Mobile Device: An Experimental Evaluation," in the *Proceedings of the 2013 International Symposium on Performance Analysis of Systems and Software (ISPASS'13)*, April 21-23, Austin, TX, pp. 126-127 (poster paper, 23+12p out of 87). DOI: 10.1109/ISPASS.2013.6557156
- C#47.**
[ACM.SE'13] Mladen Milosevic, Armen Dzhangaryan, Emil Jovanov, **Aleksandar Milenković**, "An Environment for Automated Power Measurements on Mobile Computing Platforms," in the *Proceedings of the 51st Annual ACM Southeast Conference (ACMSE'13)*, April 04-06, Savannah, GA.
- C#46.**
[IEEE.bioCAS'11] Mladen Milosevic, Emil Jovanov, **Aleksandar Milenković**, "Rapid Processor Customization for Design Optimization: a Case Study of ECG R-Peak Detection," in the *Proceedings of the 2011 Annual IEEE Biomedical Circuits and Systems (BioCAS) Conference*, November 14-16, San Diego, CA, pp. 209-212. DOI: 10.1109/BioCAS.2011.6107764 (31o+72p/199; ~56% acceptance rate)
- C#45.**
[IEEE.SSST'11] Nason Tackett, Emil Jovanov, **Aleksandar Milenković**, "An Implementation of Time Synchronization in Low-Power Wireless Sensor Networks," in the *Proceedings of the 2011 Joint IEEE International Conference on Industrial Technology (ICIT-2011) and 43rd Southeastern Symposium on System Theory (SSST-2011)*, March 2011, Auburn, AL. DOI: 10.1109/SSST.2011.5753777

- C#44.**
[ACM.CASES'10b] Vladimir Uzelac, **Aleksandar Milenković**, "Hardware-Based Data Value and Address Trace Filtering Techniques," in the *Proceedings of the International Conference on Compilers, Architectures and Synthesis of Embedded Systems (CASES'10)*, October 24-29, Scottsdale, AZ, pp. 117-126. DOI: 10.1145/1878921.1878940 (**best paper award**)
- C#43.**
[ACM.CASES'10a] Vladimir Uzelac, **Aleksandar Milenković**, Milena Milenković, Martin Burtscher, "Real-time Unobtrusive Program Execution Trace Compression Using Branch Predictor Events," in the *Proceedings of the International Conference on Compilers, Architectures and Synthesis of Embedded Systems (CASES'10)*, October 24-29, Scottsdale, AZ, pp. 97-106. DOI: 10.1145/1878921.1878938
- C#42.**
[IEEE.ICCD'09] Vladimir Uzelac, **Aleksandar Milenković**, Milena Milenković, Martin Burtscher "Real-time, Unobtrusive, and Efficient Program Execution Tracing with Stream Caches and Last Stream Predictors," in the *Proceedings of the 27th IEEE International Conference on Computer Design (ICCD'09)*, October 4-7, Lake Tahoe, CA. DOI: 10.1109/ICCD.2009.5413159 (70 out of 200, ~35% acceptance rate)
- C#41.**
[IEEE.DAC'09] Vladimir Uzelac, **Aleksandar Milenković**, "A Real-Time Program Trace Compressor Utilizing Double Move-to-Front Method," in the *Proceedings of the 46th Design Automation Conference (DAC'09)*, July 26-31, San Francisco, CA, pp. 738-743. DOI: 10.1145/1629911.1630102 (148 out of 682, ~21% acceptance rate)
- C#40.**
[IEEE.ERSA'09] Austin Rogers, **Aleksandar Milenković**, "An Implementation of Security Extensions for Data Integrity and Confidentiality in Soft Core Processors," in the *Proceedings of the Engineering of Reconfigurable Systems and Algorithms - ERSA'09*, July 13-16, Las Vegas, NV.
- C#39.**
[IEEE.ISPASS'09] Vladimir Uzelac, **Aleksandar Milenković**, "Experiment Flows and Microbenchmarks for Reverse Engineering of Branch Predictor Structures," in the *Proceedings of the 2009 IEEE International Symposium on Performance Analysis of Systems and Software (ISPASS'09)*, April, 2009, Boston, MA. DOI: 10.1109/ISPASS.2009.4919652 (~25% acceptance rate)
- C#38.**
[IEEE.SSST'09] Dejan Raskovic, Venkatramana Revuri, David Giessel, **Aleksandar Milenković**, "Embedded Web Server for Wireless Sensor Networks," in the *Proceedings of the 41st IEEE Southeastern Symposium on System Theory (SSST'09)*, Tullahoma, TN, USA, March 15-17, 2009, pp. 154-158. DOI: 10.1109/SSST.2009.4806814
- C#37.**
[IEEE.SSST'08] Joel L. Wilder, Vladimir Uzelac, **Aleksandar Milenković**, Emil Jovanov, "Runtime Hardware Reconfiguration in Wireless Sensor Networks," in the *Proceedings of the 40th IEEE Southeastern Symposium on System Theory (SSST'08)*, New Orleans, LA, March 2008, pp. 154-158. DOI: 10.1109/SSST.2008.4480210
- C#36.**
[IEEE.SSST'08] Joel L. Wilder, **Aleksandar Milenković**, Emil Jovanov, "Smart Wireless Vehicle Detection System," in the *Proceedings of the 40th IEEE Southeastern Symposium on System Theory (SSST'08)*, New Orleans, LA, March 2008, pp. 159-163. DOI: 10.1109/SSST.2008.4480211
- C#35.**
[IEEE.ICCD'07] Austin Rogers, Milena Milenković, **Aleksandar Milenković**, "A Low Overhead Hardware Technique for Software Integrity and Confidentiality," in the *Proceedings of the 2007 IEEE International Conference on Computer Design (ICCD'07)*, Olympic Valley, CA, October 7-10, 2007, pp. 113-120. DOI: 10.1109/ICCD.2007.4601889 (~30% acceptance rate)
- C#34.**
[IEEE.ISCAS'07] Ashkan Ashrafi, **Aleksandar Milenković**, Reza Adhami, "A 1GHz Direct Digital Frequency Synthesizer Based on the Quasi-Linear Interpolation Method," in the *Proceedings of the 2007 IEEE International Symposium on Circuits and Systems (ISCAS)*, pp. 2766-2769. DOI: 10.1109/ISCAS.2007.378626
- C#33.**
[IEEE.DCC'07] Milena Milenkovic, **Aleksandar Milenković**, Martin Burtscher, "Algorithms and Hardware Structures for Unobtrusive Real-Time Compression of Instruction and Data Address Traces," in the *Proceedings of the 2007 Data Compression Conference (DCC'07)*, Snowbird, UT, March 27-29, IEEE Computer Society, pp. 55-65. DOI: 10.1109/DCC.2007.10

- C#32.**
[IEEE.ISSS-MDBS'06] Chris A. Otto, Emil Jovanov, **Aleksandar Milenković**, "A WBAN-based System for Health Monitoring at Home," in the *Proceedings of the 3rd IEEE-EMBS International Summer School and Symposium on Medical Devices and Biosensors (ISSS-MDBS 2006)*, September 2006. DOI: 10.1109/ISSMDBS.2006.360087
- C#31.**
[ACM.CASES'05] Milena Milenković, **Aleksandar Milenković**, Emil Jovanov, "Hardware Support for Code Integrity in Embedded Processors," in the *Proceedings of the International Conference on Compilers, Architectures and Synthesis of Embedded Systems (CASES'05)*, San Francisco, CA, Sept. 24 – Sept. 27, 2005, pp. 55-65. (~30% acceptance rate)
- C#30.**
[IEEE.EMBS'05b] Emil Jovanov, **Aleksandar Milenković**, Chris Otto, Piet de Groen, Bruce Johnson, Steve Warren, Gueseppe Taibi, "A WBAN System for Ambulatory Monitoring of Physical Activity and Health Status: Applications and Challenges," in the *Proceedings of the 27th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS)*, Shanghai, China, September 2005. DOI: 10.1109/IEMBS.2005.1615290
- C#29.**
[IEEE.EMBS'05a] Steve Warren, Jeffrey Lebak, Jianchu Yao, Jonathan Creekmore, **Aleksandar Milenković**, Emil Jovanov, "Interoperability and Security in Wireless Body Area Network Infrastructures," in the *Proceedings of the 27th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS)*, Shanghai, China, September 2005. DOI: 10.1109/IEMBS.2005.1615297
- C#28.**
[IEEE.SSST'05b] **Aleksandar Milenković**, Milena Milenković, Emil Jovanov, Dennis Hite, Dejan Raskovic, "An Environment for Runtime Power Monitoring of Wireless Sensor Network Platforms," in the *Proceedings of the 37th IEEE Southeastern Symposium on System Theory (SSST'05)*, Tuskegee, AL, March 2005, pp. 406-410.
- C#27.**
[IEEE.SSST'05a] Dennis Cox, Emil Jovanov, **Aleksandar Milenković**, "Time Synchronization for ZigBee Networks," in the *Proceedings of the 37th IEEE Southeastern Symposium on System Theory (SSST'05)*, Tuskegee, AL, March 2005, pp. 135-138.
- C#26.**
[ACM.SE'05] Chris Otto, John P. Gober, Reggie W. McMurtrey, **Aleksandar Milenković**, Emil Jovanov, "An Implementation of Hierarchical Signal Processing on a Wireless Sensor in TinyOS Environment," in the *Proceedings of the 43rd ACM Southeastern Conference*, Kennesaw, GA, March 2005, Vol. 2, pp. 49-53.
- C#25.**
[ACM.WASSA'04] Milena Milenković, **Aleksandar Milenković**, Emil Jovanov, "Using Instruction Block Signatures to Counter Code Injection Attacks," in the *Proceedings of the Workshop on Architectural Support for Security and Anti-Virus (WASSA)* (held in conjunction with 11th ASPLOS), Boston, Massachusetts, USA, October 9, 2004, pp. 104–113.
- C#24.**
[IEEE.EMBS'04] Emil Jovanov, **Aleksandar Milenković**, S. Basham, D. Clark, D. Kelley, "Reconfigurable Intelligent Sensors for Health Monitoring: A Case Study of Pulse Oximeter Sensor," in the *Proceedings of the 26th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, San Francisco, California*, September 2004, pp. 4759–4762.
- C#23.**
[ACM.SE'04d] Swathi T. Gurumani, **Aleksandar Milenković**, "Execution Characteristics of SPEC CPU2000 Benchmarks: Intel C++ vs. Microsoft VC++," in the *Proceedings of the 42nd ACM Southeast Conference*, April 2-3, 2004, Huntsville, AL, pp. 261-266.
- C#22.**
[ACM.SE'04c] Milena Milenković, **Aleksandar Milenković**, Emil Jovanov, "A Framework For Trusted Instruction Execution Via Basic Block Signature Verification," in the *Proceedings of the 42nd ACM Southeast Conference*, April 2-3, 2004, Huntsville, AL, pp. 191-196.
- C#21.**
[ACM.SE'04b] H. Al-Zoubi, **Aleksandar Milenković**, Milena Milenković, "Performance Evaluation of Cache Replacement Policies for the SPEC CPU2000 Benchmark Suite," in the *Proceedings of the 42nd ACM Southeast Conference*, April 2-3, 2004, Huntsville, AL, pp. 267-272.
- C#20.**
[ACM.SE'04a] Zexin Pan, Wendy D. Pan, **Aleksandar Milenković**, "Complexity-Distortion Tradeoffs in Variable Complexity 2-D DCT," in the *Proceedings of the 42nd ACM Southeast Conference, April 2-3, 2004, Huntsville, AL*, pp. 460-465.

- C#19.**
[IEEE.WWC'03] **Aleksandar Milenković**, Milena Milenković, "Exploiting Streams in Instruction and Data Address Trace Compression," in the *Proceedings of the IEEE 6th Annual Workshop on Workload Characterization*, Austin, TX, USA, October 27, 2003, pp. 99-107. DOI: 10.1109/WWC.2003.1249061
- C#18.**
[ISCA.PDCS'03] **Aleksandar Milenković**, Milena Milenković, Jeffrey Kulick, "N-Tuple Compression: A Novel Method for Compression of Branch Instruction Traces," in the *Proceedings of the 16th International Conference on Parallel and Distributed Computing Systems (PDCS-2003)*, Reno, Nevada, USA, August 13-15, 2003, pp. 49-55.
- C#17.**
[IEEE.MSE'03] **Aleksandar Milenković**, David Fatzer, "Teaching IP Core Development: An Example," in the *Proceedings of the 2003 International Conference on Microelectronic Systems Education*, Anaheim, California, USA, June 1-2, 2003, pp. 16-17. DOI: 10.1109/MSE.2003.1205234
- C#16.**
[IEEE.SSST'03] **Aleksandar Milenković**, Milena Milenković, and Nelson Barnes, "A Performance Evaluation of Memory Hierarchy in Embedded Systems," in the *Proceedings of the 35th IEEE Southeastern Symposium on System Theory*, Morgantown, West Virginia, USA, 16-18 March 2003, pp. 427-431.
- C#15.**
[DoD.HPC'02] Kenneth G. LeSueur, Emil Jovanov, and Aleksandar Milenkovic, "Lookup Table Based Real-Time Non-Uniformity Correction Of Infrared Scene Projectors," in the *Proceedings of the 12th Annual DoD High Performance Computing Modernization User Group Conference*, Austin, Texas, June 2002.
- C#14.**
[WWD'02] Milena Milenković, **Aleksandar Milenković**, and Jeffrey Kulick, "Demystifying Intel Branch Predictors," in the *Proceedings of the Workshop on Duplicating, Deconstructing, and Debunking (held in conjunction with 29th ISCA)*, Anchorage, Alaska, May 2002.
- C#13.**
[WCAE'02] **Aleksandar Milenković**, Bosko Nikolic, Jovan Djordjevic, "CASTLE: Computer Architecture Self-Testing and Learning System," in the *Proceedings of the Workshop on Computer Architecture Education (held in conjunction with 29th ISCA)*, Anchorage, Alaska, May 2002.
- The University of Belgrade Belgrade, Serbia
- C#12.**
[IEEE.MASCOTS'00] Darko Marinov, Davor Magdic, **Aleksandar Milenković**, Jelica Protic, Igor Tartalja, and V. M. Milutinovic, "SCOWL: A Tool for Characterization of Parallel Workload and its Use on Splash-2 Application Suite," in the *Proceedings of the 8th International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS)*, San Francisco, California, August/September 2000, pp. 207-213.
- C#11.**
[Springer.EuroPar'00] **Aleksandar Milenković** and Veljko M. Milutinovic, "Cache Injection: A Novel Technique for Tolerating Memory Latency in Bus-Based SMPs," *Lecture Notes in Computer Science*, vol. 1900, in the *Proceedings of the 6th International Euro-Par Conference*, Munich, Germany, August/September 2000, pp. 558-566.
- C#10.**
[Springer.PPAM'99] Igor Ikodinovic, **Aleksandar Milenković**, Veljko M. Milutinovic, and Davor Magdic, "Limes: A Multiprocessor Simulation Environment for PC Platforms," in the *Proceedings of the 3rd International Conference on Parallel Processing and Applied Mathematics (PPAM'99)*, Kazimierz Dolny, Poland, September 14-17, 1999, pp. 398-412.
- C#9.**
[WCAE'99] Jovan Djordjevic, **Aleksandar Milenković**, Ivan Todorovic, and Darko Marinov, "CALKAS: A Computer Architecture Learning and Knowledge Assessment System," in the *Proceedings of the 4th Annual Workshop on Computer Architecture Education, (held in conjunction with 5th HPCA)*, Orlando, Florida, USA, January 1999.
- C#8.**
[IEEE.APADS'98] **Aleksandar Milenković** and Veljko M. Milutinovic, "Cache Injection on Bus-based Multiprocessors," in the *Proceedings of the Workshop on Advances in Parallel and Distributed Systems, (held in conjunction with 17-th IEEE Symposium on Reliable Distributed Systems)*, West Lafayette, Indiana, October 1998.

- C#7.**
[ISCEE'98] Jovan Djordjevic, Miroslav Bojovic, and **Aleksandar Milenković**, "An Integrated Educational Environment for Computer Architecture and Organization," in the *Proceedings of the International Symposium on Computer Employment and Education (ISCEE'98)*, Amiens, France, October 1998.
- C#6.**
[WCAE'98isca] Jovan Djordjevic, **Aleksandar Milenković**, and Slobodan Prodanovic, "A Hierarchical Memory System Environment," in the *Proceedings of the Workshop on Computer Architecture Education (held in conjunction with 25th ISCA)*, Barcelona, Spain, June 1998.
- C#5.**
[WCAE'98hpca] Jovan Djordjevic, **Aleksandar Milenković**, Nenad Grbanovic, and Miroslav Bojovic, "An Educational Environment for Teaching a Course in Computer Architecture and Organization," in the *Proceedings of the 4th Annual Workshop on Computer Architecture Education, (held in conjunction with 4th HPCA)*, Las Vegas, Nevada, January 1998.
- C#4.**
[IEEE.HICSS'98b] Darko Marinov, Davor Magdic, **Aleksandar Milenković**, Jelica Protic, Igor Tartalja, and V. M. Milutinovic, "An Approach to Characterization of Parallel Applications for DSM Systems," in the *Proceedings of the 31st HICSS*, IEEE Computer Society Press, Vol. 7, January 1998, pp. 782-784.
- C#3.**
[IEEE.HICSS'98a] **Aleksandar Milenković** and Veljko M. Milutinovic, "Lazy Prefetching," in the *Proceedings of the 31st HICSS*, IEEE Computer Society Press, Vol. 7, January 1998, pp. 780-782.
- C#2.**
[IEEE.MIEL'97] **Aleksandar Milenković** and Veljko M. Milutinovic, "A Quantitative Analysis of Wiring Lengths in 2D and 3D VLSI Implementations of 3D Systolic Arrays," in the *Proceedings of the MIEL'97*, Vol. 2, Nis, Yugoslavia, September 1997, pp. 833-837.
- C#1.**
[IEEE.MASCOTS'97] Veljko M. Milutinovic, **Aleksandar Milenković**, and Gad Sheaffer, "The Cache Injection Control Architecture: Initial Performance Analysis," in the *Proceedings of the 5th International Symposium on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS)*, Haifa, Israel, January 1997.

B. Books

The University of Belgrade Belgrade, Serbia

- B#2.** [AM.IntrCD'14] Jovan Djordjevic, Zaharije Radivojevic, Marija Punt, Jelica Protic, Dragan Milicev, Aleksandar Milenkovic, *Introduction to Computer System Design: Problems and Solutions*, Academic Mind, Belgrade, Serbia, 2014 (ISBN:978-86-7466-508-4)
- B#1.** [AM.IntroCE] Jelica Protic, **Aleksandar Milenković**, *Introduction to Computer Engineering: Problems and Solutions* (in Serbian), Academic Mind, Belgrade, Serbia, 2000.

BC. Book Chapters

The University of Alabama in Huntsville Huntsville, AL

- BC#8.**
[JBL'18] Mladen Milosevic, Emil Jovanov, **Aleksandar Milenkovic**, Mobile Health Applications, in *Applied Clinical Informatics in Nursing*, editors: Susan Alexander, Karen Frith, Haley Hoy, Jones and Bartlett Learning, Burlington, MA, 2018, 2nd edition.
- BC#7.**
[Elsevier'17] Emil Jovanov, Karen H. Frith, Priyanka Madhushri, Amy Hunter, Sharon S. Coffey, Aleksandar Milenkovic, Gender differences in mobility of elderly: Measurements and interventions to improve mobility, in *Principles of Gender-Specific Medicine*, Marianne J. Legato, Ed., Elsevier, 2017.
- BC#6.**
[RiverPub'16] Armen Dzagharyan, Aleksandar Milenković, Martin Burtscher, Improving Effectiveness of Data Transfers In Mobile Computing Using Lossless Compression Utilities, *Advances in Computer Communications and Networks – From Green, Mobile, Pervasive Networking to Big Data Computing*, Editors: Kewei Sha, University of Houston, Clear Lake, USA; Aaron Striegel, University of Notre Dame, USA; Min Song, Michigan Tech, USA, River Publisher, December 2016, ISBN: 9788793379879.
- BC#5.**
[JBL'14] Mladen Milosevic, Emil Jovanov, **Aleksandar Milenkovic**, Mobile Health Applications, in *Applied Clinical Informatics in Nursing*, editors: Susan Alexander, Karen Frith, Haley Hoy, Jones and Bartlett Learning, Burlington, MA, 2014, ISBN-13: 9781284049961.

BC#4 **Aleksandar Milenković**, Addressing: Direct and Indirect, *Wiley's Encyclopedia of Computer Science and Engineering*, Editor: Benjamin Wah, Wiley, 2009.

BC#3. Dejan Rašković, **Aleksandar Milenković**, Dr. Piet C. De Groen, Emil Jovanov, *From Telemedicine To Ubiquitous M-Health: The Evolution Of E Health Systems*, in *Biomedical Information Technology*, Edited by David Dagan Feng, Elsevier, 2008.

The University of Belgrade Belgrade, Serbia

BC#2. Igor Ikodinovic, Zoran Dimitrijevic, Davor Magdic, **Aleksandar Milenković**, Jelica Protic, and Veljko Milutinovic, "Limes: A Multiprocessor Simulation Environment for PC Platforms," in *Surviving the Design of Microprocessor and Multimicroprocessor Systems* by V. Milutinovic, John Wiley & Sons, Inc., USA, 2000.

BC#1. Darko Marinov, Davor Magdic, **Aleksandar Milenković**, Jelica Protic, and Veljko Milutinovic, "The Scowl Tool for PC-Based Characterization of Parallel Applications," in *Surviving the Design of Microprocessor and Multimicroprocessor Systems* by V. Milutinovic, John Wiley & Sons, Inc., USA, 2000.

O. Other Publications (Editor Reviewing)

The University of Alabama in Huntsville Huntsville, AL

O#11. David Coe, Jeffrey Kulick, **Aleksandar Milenkovic**, Sun-Il Kim and Letha Etzkorn, "An Approach to Securing Cloud and Internet of Things Applications," *2016 National Cyber Summit*, Huntsville, AL.

O#10. Mladen Milosevic, **Aleksandar Milenkovic**, Emil Jovanov, "mHealth @ UAH: computing infrastructure for mobile health and wellness monitoring," *XRDS: Crossroads, The ACM Magazine for Students*, Vol. 20, No. 2, December 2013, pp. 43-49. DOI: 10.1145/2539269.

O#9. Mladen Milosevic, Michael T. Shrove, **Aleksandar Milenkovic**, Emil Jovanov, "Smartphone Application Framework for Research in Wellness and Healthcare," in the *Proceedings of the 2012 Southeastern Workshop on Cognitive Sensing, Computing & Networking and their Applications in Human-Cyber-Physical Systems*, Tuscaloosa, AL, August 2012, pp. 77.

O#8. Emil Jovanov, Mladen Milosevic, **Aleksandar Milenkovic**, Michael T. Shrove, Karen Frith, Fay Anderson, "Personalized Assessment of Occupational Stress of Nurses," in the *Proceedings of the 9th International Forum on Life Science Automation*, Washington, DC, December 2011, pp. 25.

O#7. Michael T. Shrove, Mladen Milosevic, Bruce Johnson, **Aleksandar Milenkovic**, Emil Jovanov, "iCareWell: Real-time Wellness Monitor," *1st IEEE EMBS Unconference on Wearable & Ubiquitous Technology for Health and Wellness*, Boston, MA, USA, August 30, 2011, pp. 24.

O#6. **Aleksandar Milenković**, Jeffrey Kulick, Rhonda Gaede, "Tamper Protection of Hardware/Software Systems Using Dynamic Re-configuration of FPGAs," *Reconfigurable Systems, Microsystems, and Nanotechnology Conference*, May 8-10, 2007, Redstone Arsenal, AL.

O#5. Joel Wilder, Vladimir Uzelac, **Aleksandar Milenković**, Emil Jovanov "Wireless Sensor Networks for Updating Reprogrammable Logic Designs in Real-time," *Reconfigurable Systems, Microsystems, and Nanotechnology Conference*, May 8-10, 2007, Redstone Arsenal, AL.

O#4. Xiaofang Chen, Emil Jovanov, **Aleksandar Milenković**, "A Real-Time Step Detection Using A Single 3d Accelerometer On The Upper-Trunk," *Proceedings of the Mini-Symposium on Digital Healthcare at 24th Annual Houston Conference on Biomedical Engineering Research*, Houston, TX, February 2007, pp. 239, 2007.

The University of Belgrade Belgrade, Serbia

O#3. Jovan Djordjevic, **Aleksandar Milenković**, Igor Todorovic, Darko Marinov, "CALKAS: A Computer Architecture Learning and Knowledge Assessment System," *IEEE TCCA Newsletter*, July 2000, pp. 26–29.

- O#2. Jovan Djordjevic, **Aleksandar Milenković**, Nenad Grbanovic and Miroslav Bojovic, "An Educational Environment for Teaching a Course in Computer Architecture and Organization," *IEEE TCCA Newsletter*, July 1999, pp. 5–7.
- [IEEE.TCCA'99b]
- O#1. Jovan Djordjevic, **Aleksandar Milenković** and Slobodan Prodanovic, "A Hierarchical Memory System Environment," *IEEE TCCA Newsletter*, February 1999, pp. 60–62.
- [IEEE.TCCA'99a]

Invited lectures, colloquia

The University of Alabama in Huntsville Huntsville, AL

- T#12.UK'20 **Aleksandar Milenković**, *Exploiting Physical of Non-Volatile Memories for Enhancing Security and Energy-Efficiency in IoTs*, University of Kragujevac, April 2020 (Guest Lecture via Zoom).
- T#11.SSCET'18 **Aleksandar Milenković**, *Saving Time, Energy, and Money Through Compressed File Transfers*, Southeast Symposium on Contemporary Engineering Topics/UAH Engineering Forum, August 2018.
- [T#10.NCHPAD'13] **Aleksandar Milenković**, Emil Jovanov, "mHealth – Computing Infrastructure for Mobile Health and Wellness Monitoring," the National Center for Health, Physical Activity and Disability in Birmingham, AL, 2013 (research collaborative between UAB and Lakeshore Foundation, <http://nchpad.org/>).
- [T#9.UAH'13] **Aleksandar Milenković**, Emil Jovanov, "mHealth – Computing Infrastructure for Mobile Health and Wellness Monitoring," Honors Lecture Series, Huntsville, AL, March 21st, 2013.
- [T#8.UB'12] **Aleksandar Milenković**, "Embedded Computer Systems: Debuggability and Energy Efficiency," University of Belgrade, Belgrade, Serbia, June 29, 2012. (over 40 attendees).
- [T#7.Tensilica'09] **Aleksandar Milenković**, "Algorithms and Hardware Structures for Real-time, Unobtrusive, and Cost-effective Program Tracing," (over 50 attendees), Tensilica, San Jose, CA, July 2009.
- [T#6.UB'09] **Aleksandar Milenković**, "Computer Architectures for Increased Programmers' Productivity," University of Belgrade, Serbia, (over 50 attendees), June 2009.
- [T#5.Cornell'07] **Aleksandar Milenković**, "Instruction and Data Address Trace Compression," Cornell University, May 2007.
- [T#4.UB'05] **Aleksandar Milenković**, "Fundamental Metrics in Computer Engineering," University of Belgrade, Serbia and Montenegro, May 2005 (sponsored by WUS Austria's Brain Gain Program).
- [T#3.UB'05] **Aleksandar Milenković**, "LaCASA Laboratory Research Overview," University of Belgrade, Serbia and Montenegro, May 2005 (sponsored by WUS Austria's Brain Gain Program).
- [T#2.TxState'05] **Aleksandar Milenković**, "LaCASA Laboratory Research Overview," Texas State University, San Marcos, April 2005.
- [T#1.UTK'02] **Aleksandar Milenković**, "Architecture-Aware Compilers," University of Tennessee in Knoxville, May 2002.

Grants

RG. Research Grants

The University of Alabama in Huntsville Huntsville, AL

- 01/04/2021 – David Coe (PI), Aleksadnar Milenkovic (coPI), Letha Etzkorn (coPI), Quantum Academic Partnership
05/31/2021 Program, *Evaluation of an Artificial Intelligence-Based Penetration Testing Tool*, Quantum Research International Inc., Total: \$19,902.

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| 10/01/2020 – 09/30/2022 | David Coe (PI), Aleksandar Milenkovic (coPI), Letha Etzkorn (coPI), CanarySat: A Virtual Cubesat Model for Cybersecurity Research and Education , NSA, CAE-C Cybersecurity Education Innovation: Year 1: \$150,000.00, Year 2 option: \$150,000.00. |
| 10/01/2020 – 09/30/2023 | Biswajit Ray (PI), Aleksandar Milenkovic (coPI), NSF/CNS Core: Small: Ensuring Privacy by Runtime Analog Sanitization of Solid State Storage Devices , NSF CNS Core Programs, NSF-2007403, Total: \$496,925.00. |
| 09/01/2017 – 08/31/2019 | David Coe (PI), Jeffrey Kulick, Aleksandar Milenkovic, Letha Etzkorn, Hands-On Learning Modules for Infusion of Cybersecurity Education Throughout Computing Curriculums , S-004-2017 CAE Cybersecurity (CAE-C) "Investment in Expansion of CAE-C Education Programs", NSA, Total: \$287,342.82 |
| 09/01/2016 – 08/31/2017 (NCE – 08/31/2018) | Tommy Morris (PI), David Coe, Jeffrey Kulick, Letha Etzkorn, Aleksandar Milenkovic, Cybersecurity Education for Army Reservists, NSA (Tasks: Software Reverse Engineering Course Development ~\$50K + \$? Research: Capability Building). |
| 09/01/2015 – 08/31/2016 | David Coe (PI), Jeffrey Kulick, Sun-il Kim, Letha Etzkorn, Aleksandar Milenkovic, Dielectric: Lightweight Virtualization for Insulating Cyber Physical and Cloud Applications , NSA/DHS, total: \$299,622. |
| 09/01/2012 – 08/31/2016 | Aleksandar Milenković (PI) , Martin Burtscher (coPI), Real-Time Unobtrusive Tracing in Multicore Embedded Systems , NSF Award No. CNS-1217470 , UAH portion \$321,388, total: \$494,348. |
| 08/15/2012 – 12/31/2015 | Aleksandar Milenković (PI) , Emil Jovanov (coPI), II-NEW: mHealth - Computing Infrastructure for Mobile Health and Wellness Monitoring, NSF, Award No. CNS-1205439 , total: \$232,723. |
| 09/01/2009 – 12/31/2010 | Aleksandar Milenković (PI) , II-NEW: Acquisition of FPGA-Based Emulation Hardware for Research in Computer Systems Architecture, NSF, Award No. CNS-0855237 , total: \$161,868. |
| 08/15/2009 – 02/28/2010 | Jeffrey Kulick (PI), Rhonda Gaede (coPI), Earl Wells (coPI), Aleksandar Milenković (coPI) , Performance Analysis, Subcontract: Performance Analysis and Compiler Optimization on Multicore Processors, SAIC Inc. contract, \$9,374 Milenkovic's share, total: ~\$250,000. |
| 09/01/2008 – 08/31/09 | Aleksandar Milenković (PI) , Enabling Computer Architecture Research in Multi-Core Era @ UAHuntsville, ECE Research Enhancement, total: \$20,000. |
| 09/01/2007 – 08/31/2010 | John Gregory (PI), Robert Lindquist (coPI), Aleksandar Milenković (coPI) , Junpeng Guo (coPI), Emil Jovanov (coPI), Claudiu Muntele (coPI), Jennifer English (coPI), David Coe (coPI), Robert Zimmerman, "Device Realization for Sensor Health Monitoring of Space Transportation Systems," NASA 07-EPSCoR-0003 , total: \$748,500. |
| 08/01/2004 – 07/31/2007 | Dejan Raskovic (PI), Aleksandar Milenković (coPI) , Denise Thorsen (coPI), Emil Jovanov (coPI), "IIS: Energy Efficiency in Distributed Sensor Networks," NSF Award no. 0434156 , total: \$434,600 = \$199,660+\$100,000+\$135,000 (two supplemental awards). |
| 01/2002 – 09/2002 | Aleksandar Milenković (PI) , "Cache Replacement Policies for Future Processors," UAH Mini-Grant Award, total: \$5,170. |

TG. Teaching Grants

The University of Alabama in Huntsville Huntsville, AL

| | |
|----------------------------|---|
| 04/04/2013 – 04/03/2014 | Aleksandar Milenković (PI) , Earl Wells (coPI), CUDA Teaching Center, NVIDIA, April 2013 – April 2014; unrestricted gift in money and equipment (~ \$5,000). |
| 01/02/2003 – 09/30/2003 | Aleksandar Milenković (PI) , "Building Systems on a Chip Using IP Soft Cores," UAH Instructional Mini-Grant (\$3,000). |
| 01/02/2002 – 09/30/2002 | Aleksandar Milenković (PI) , "CASTLE: Computer Architecture Self-Testing and Learning," UAH Instructional Mini-Grant (\$3,000). |

EG. Equipment Grants (Hardware/Software)

The University of Alabama in Huntsville Huntsville, AL

| | |
|----------------------------|---|
| 12/2016 | Aleksandar Milenkovic (PI), Hardware + Software Donation – ARM , 5 Development Boards, Kiel Software Development Studio |
| 2015 - 2020 | Aleksandar Milenković (PI), Software Donation - Intel ; Intel® Software Development Suite Classroom use license; 25 Floating seats |
| 05/2015 | Aleksandar Milenkovic (PI), Hardware Donation – Intel , 10 Galielo 2 Boards (~\$500). |
| 02/2014 | Aleksandar Milenković (PI), Hardware Donation – Intel ; 10 Intel Galileo Boards (~ \$500). |
| 05/10/2013 – 05/09/2014 | Aleksandar Milenković (PI), Software Donation – Tensilica ; Xtensa Processor Generator (XPG) login; (10 floating licenses). |
| 09/10/2013 – 09/09/2014 | Aleksandar Milenković (PI), Software Donation - Intel ; Intel® Software Development Suite Classroom use license; 25 Floating seats |
| 12/2013 | Aleksandar Milenković (PI), Hardware Donation – Altera ; DE2-115, DE0-Nano boards (~\$400). |
| 08/15/2013 | Aleksandar Milenković (PI), Software Donation – Altera ; Quartus 2 and Nios II EDS Software Development Suites; 25 Floating seats; |
| 09/10/2012 – 09/09/2013 | Aleksandar Milenković (PI), Software Donation - Intel ; Intel® Software Development Suite Classroom use license; 25 Floating seats |
| 05/10/2012 – 05/09/2013 | Aleksandar Milenković (PI), Software donation – Tensilica ; Xtensa Processor Generator (XPG) login; (10 floating licenses) |
| 05/10/2011 – 05/09/2012 | Aleksandar Milenković (PI), Software donation – Tensilica ; Xtensa Processor Generator (XPG) login; (10 floating licenses) |
| 09/10/2011 | Aleksandar Milenković (PI), Software donation - Texas Instruments ; Code Composer, Academic Edition, (100 floating licenses) |
| 09/10/2011 – 09/09/2012 | Aleksandar Milenković (PI), Software Donation - Intel ; Intel® Software Development Suite Classroom use license; 25 Floating seats |
| 09/10/2010 – 09/09/2011 | Aleksandar Milenković (PI), Software Donation - Intel ; Intel® Software Development Suite Classroom use license; 25 Floating seats |
| 11/2009 | Aleksandar Milenković (PI); Xilinx ; Xilinx XUP-FPGA-LX155T; Xilinx University Program LX155T FPGA chip donation for BEE3 system (4 per system) 8 |
| 03/01/2010 – 02/28/2011 | Aleksandar Milenković (PI), BEEcube ; BEEcube Platform Studio; 1 year time based single node-lock seat software license |
| 09/10/2009 – 09/09/2010 | Aleksandar Milenković (PI), Intel ; Intel® Software Development Suite Classroom use license; 25 Floating seats |
| 01/18/2009 – 05/05/2010 | Aleksandar Milenković (PI) , Tensilica; Xtensa Processor Generator (XPG) login; |
| 04/01/2003 – 09/30/2003 | Aleksandar Milenković (PI) , Xilinx Donation (Software) (\$4,490) |
| 04/01/2002 – 03/13/2003 | Aleksandar Milenković (PI) , Xilinx Donation (Hardware) (\$244,295) |

IG. Grants from Industry

The University of Belgrade Belgrade, Serbia

| | |
|---------------|---|
| 03/99 – 09/99 | PTT Network analysis and capacity planning (JP PTT Serbia) |
| 01/00 – 06/00 | Development analysis (HIP - Cybernetic Center, Pancevo, Serbia, 2000) |

| | |
|---------------|---|
| 01/97 – 03/98 | Reflective memory optimization for DSM-based disk IO pumps (Encore, FL) |
| 01/96 – 09/96 | DARTS: Digital Audio System (RTS, Belgrade, Serbia) |

Teaching Experience

The University of Alabama in Huntsville Huntsville, AL
Taught Graduate (5xx, 6xx, 7xx) and Undergraduate Courses (3xx, 4xx), Created a new undergraduate course Introduction to Embedded Computer Systems (CPE 323), Created a new Embedded Systems Laboratory (CPE 325), Developed Advanced Computer Systems Architecture (CPE 631), Developed VLSI Design (CPE/EE 427/527).

| | |
|---|--|
| S'09 | CPE 730 ST: Computer Architecture |
| F'18, F'16, F'14, F'09, S'08 | CPE 619 Modeling and Analysis of Computer and Communication Systems http://www.ece.uah.edu/~milenska/cpe619-08S/ |
| S'20, S'19, S'18, S'17, S'16, S'15, S'14, S'13, S'12, S'11 S'10, F'08, S'08, S'07, S'06, S'05, S'04, S'03, S'02, F'01 | CPE 631 Advanced Computer Systems Architecture http://www.ece.uah.edu/~milenska/cpe631-10S/ |
| F'04, F'02, S'02 | CPE 626 Advanced VLSI Systems http://www.ece.uah.edu/~milenska/cpe626-04F/ |
| F19, F17, F'15, F'13 | CPE 423/523 Hardware/Software Co-design |
| S'20, F'19, S'19, F'18, S'18, F'17, S'17, F'16, S'16, F'15, F'14, S'14, F'13, SM'13, S'13, F'12, S'12, S'11, S'10, F'09, S'09, F'08, F'07 | CPE 323 Introduction to Embedded Computer Systems http://www.ece.uah.edu/~milenska/cpe323-10S/ |
| S'07, F'06, S'06, F'05, S'05, S'04, F'03 | CPE/EE 521 (CPE/EE 421) Microcomputers http://www.ece.uah.edu/~milenska/cpe421-06S/ |
| F'17, S'14, F'12, F'10 F'06, F'05, F'04, F'03, F'02, F'01 | CPE/EE 527 (CPE/EE 427) VLSI Design I http://www.ece.uah.edu/~milenska/cpe427-06S/ |
| Sm'03, Sm'02 | CPE/EE 522 (CPE/EE 422) Advanced Logic Design http://www.ece.uah.edu/~milenska/cpeee_422522_03S/ |
| S'03, S'02 | CPE/EE 528 (CPE/EE 428) VLSI Design II http://www.ece.uah.edu/~milenska/cpe528-03S/ |

School of Computing, Dublin City University Dublin, Ireland
Taught Undergraduate Courses

| | |
|------|--|
| S'01 | CA 226 Advanced Computer Architectures |
| S'01 | CA 100 Programming Languages |

School of Electrical Engineering, University of Belgrade Belgrade, Serbia
Taught Undergraduate Courses

| | |
|------|--------------------------------------|
| S'00 | Fundamentals of Computer Engineering |
| S'00 | Multiprocessors |

Assisted in teaching graduate and undergraduate courses (gave oral recitations, prepared and graded class projects and exams). Developed laboratory exercises. Supervised undergraduate senior project designs. Co-supervised seven undergraduate 5th year theses. Co-led the development of an educational environment for teaching computer architecture: RTL design, graphic simulator, and Web based system for knowledge assessment.

| | |
|-------------|---|
| Y'95 – Y'00 | Fundamentals of Computer Engineering (Freshman level) |
| Y'94 – Y'00 | Computer Architecture (Junior level) |
| Y'94 – Y'00 | VLSI (Senior level) |
| Y'94 – Y'00 | Microprocessors and interfacing (Senior level) |

Students

Current Students

The University of Alabama in Huntsville Huntsville, AL

| <i>Name</i> | <i>Degree</i> | <i>Expected graduation</i> |
|-------------------------------|---------------|----------------------------|
| Prawar Poudel | PhD Student | F'20 |
| Ranjan Hebbar Seethur Raviraj | PhD Student | S'21 |
| Richard Tuggle | PhD Student | TBD |
| Igor Semenov | M.S. Student | S'20 |
| Ashton Johnson | M.S. Student | TBD |

Theses/Dissertations Supervised

The University of Alabama in Huntsville Huntsville, AL

| Student | Title | |
|---------------------------------------|---|--|
| [IS'20] Igor Semenov | An Implementation of ChaCah20 Stream Cypher in All-Programmable SoCs | Master Thesis, The University of Alabama in Huntsville, Summer 2020 |
| [MP'19] Mounika Ponugoti | Hardware Data Value Tracing in Multicores | Doctoral Dissertation, The University of Alabama in Huntsville, Summer 2019 |
| [RH'18] Ranjan Hebbar Seethur Raviraj | SPEC CPU2017: Performance, Energy, and Event Characterization on Modern Processors | Master Thesis, The University of Alabama in Huntsville, June 2018 |
| [PP'18] Prawar Poudel | Using NOR Flash Memory in Microcontrollers for Generating True Random Numbers | Master Thesis, The University of Alabama in Huntsville, March 2018 |
| [RC'17] Ryan Cowart | An Implementation and Experimental Evaluation of Hardware Accelerated Ciphers in All-Programmable SoCs on Embedded and Workstation Computer Platforms | Master Thesis, The University of Alabama in Huntsville, October 2017 |
| [MP'16] Mounika Ponugoti | Techniques for Capturing and Filtering Data Value Traces in Multicores | Master Thesis, The University of Alabama in Huntsville, October 2016 |
| [AD'16] Armen Dzhagaryan | A Framework for Optimizing Data Transfers Between Edge Devices and the Cloud Using Compression Utilities | Doctoral Dissertation, The University of Alabama in Huntsville, October 2016 |
| [AT'15] Amrish K. Tewar | Experimental Evaluation of Techniques for Capturing and Compressing Hardware Traces in Multicores | Master thesis, The University of Alabama in Huntsville, March 2015. |

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|---------|---|---|---|
| [AM'14] | Albert Myers | A Binary Instrumentation Tool Suite for Capturing and Compressing Traces for Multithreaded Software | Master thesis, The University of Alabama in Huntsville, March 2014. |
| [MM'13] | Mladen Milosevic (principal advisor Dr. Jovanov) | Energy-Efficient Distributed Wearable Physiological Monitoring: Framework and Implementations | Doctoral Dissertation, The University of Alabama in Huntsville, May 2013. |
| [AD'13] | Armen Dzhagaryan | Performance And Energy Efficiency Of Common Compression/Decompression Utilities: An Experimental Study In Mobile And Workstation Computer Platforms | Master thesis, The University of Alabama in Huntsville, February 2013. |
| [VU'10] | Vladimir Uzelac | Algorithms and Hardware Structures for Real-time Compression of Program Traces | Doctoral Dissertation, The University of Alabama in Huntsville, March 2010. |
| [JS'10] | John Stenmark | Program Execution Trace Compression Analysis Tool | Master thesis, The University of Alabama in Huntsville, February 2010. |
| [AR'10] | Austin Rogers | Designing Cost-Effective Secure Processors For Embedded Systems: Principles, Challenges, And Architectural Solutions | Doctoral Dissertation, The University of Alabama in Huntsville, January 2010. |
| [VU'08] | Vladimir Uzelac | Microbenchmarks and Mechanisms For Reverse Engineering Of Modern Branch Predictor Units | Master thesis, The University of Alabama in Huntsville, January 2008. |
| [RT'07] | Richard Tuggle | Multiple Path Management Protocol For the Real-time Distributed Control of Sensors and Effectors | Master thesis, The University of Alabama in Huntsville, October 2007. |
| [AR'07] | Austin Rogers | Low Overhead Hardware Techniques for Software and Data Integrity and Confidentiality in Embedded Systems | Master thesis, The University of Alabama in Huntsville, September 2007. |
| [CO'06] | Chris Otto (principal advisor Dr. Jovanov) | An Implementation of a Wireless Body Area Network for Ambulatory Health Monitoring | Master thesis, The University of Alabama in Huntsville, March 2006. |
| [MM'05] | Milena Milenkovic (principal advisor Dr. Jovanov) | Architectures for Run-time Verification of Code Integrity | Doctoral Dissertation, The University of Alabama in Huntsville, March 2005. |

Theses/Dissertations Committees (other than directly supervised)

The University of Alabama in Huntsville Huntsville, AL

Student Title

| | | | |
|----------|---------------------|--|--|
| [AR'20] | Amirahmad Ramezani | An Implementation of Embedded Software for Real Time Monitoring of Bioimpedance (dr. Jovanov is advisor) | Master Thesis, The University of Alabama in Huntsville, Fall 2020 |
| [MN'19] | Matthew Nicely | Parallel Implementation of Resampling Methods for Particle Filtering on Graphics Processing Units (Dr. Wells is advisor) | Doctoral Dissertation, The University of Alabama in Huntsville, Fall 2019 |
| [SCW'19] | Scott Corey Wolfson | Physically Derived two-dimensional predictive model for dual-gate devices using quintic splines (Dr. Ho is advisor) | Doctoral Dissertation, The University of Alabama in Huntsville, March 2019 |

| | | | |
|---------|--------------------|---|---|
| [PM'17] | Priyanka Madhushri | A Model Based Framework for Mobility Assessment of Older Adults Using Wearable Systems (Dr. Jovanov is advisor) | Doctoral Dissertation, The University of Alabama in Huntsville, Spring 2017 |
| [EF'16] | Eric Forrest | A Radar Waveform for Nuclear Scintillated Environment | Doctoral Dissertation, The University of Alabama in Huntsville, May 2016 |
| [SB'08] | Simon Baev | Causal Output Feedback Tracking in Nonminimum Phase Systems Using Sliding Mode Techniques (Dr. Shtessel is advisor) | Doctoral Dissertation, The University of Alabama in Huntsville, March 2008 |
| [PK'07] | Parisa Kaveh | Blood Glucose Level Regulation Using Higher Order Sliding Mode Techniques | Doctoral Dissertation, The University of Alabama in Huntsville, February 2007 |
| [AA'06] | Ashkan Ashrafi | A Quasi Linear Interpolation Method To Develop A Direct Digital Frequency Synthesizer with VLSI Implementation | Doctoral Dissertation, The University of Alabama in Huntsville, February 2006 |

Alumni

The University of Alabama in Huntsville Huntsville, AL

| <i>Name</i> | <i>Degree</i> | <i>First job</i> | <i>Graduated</i> |
|--|---------------|---|------------------|
| Igor Semenov | M.S. in CPE | Cepton, San Jose, CA | Sm'20 |
| Mounika Ponugoti (won the 2019 ECE Outstanding Graduate Student award) | Ph.D. in CPE | Qualcomm, San Diego, CA | Sm'19 |
| Rayan Cowart | M.S. in CPE | Navigation Technology Associates (NTA Inc.), Huntsville, AL | F'17 |
| Armen Dzhagaryan | Ph.D. in CPE | Dynetics, Huntsville, AL | F'16 |
| Amrish K. Tewar | M.S. in CPE | Mathworks, Boston, MA | S'15 |
| Albert Myers | M.S. in CPE | AMRDEC, Huntsville, AL | S'14 |
| Sunny Patel (won the Outstanding CPE and Outstanding College of Engineering Student Awards) | B.Sc. in CPE | CFD Research, Huntsville, AL | S'14 |
| Mladen Milosevic | Ph.D. in CPE | Philips Research, Briarclif, NY | Sm'13 |
| Wil C. Gilmore | B.Sc. in CPE | Lockheed Martin, Huntsville, AL | S'13 |
| Fasil Mulat | B.Sc. in EE | Grad student at Auburn University | S'11 |
| Nason Tackett | B.Sc. in CPE | Hear Technologies, Huntsville, AL | S'10 |
| Vladimir Uzelac | Ph.D. in CPE | Tensilica, San Jose, CA | S'10 |
| John Stenmark | M.S. in CPE | Dynetics, Huntsville, AL | S'10 |
| Austin Rogers | Ph.D. in CPE | Dynetics, Huntsville, AL | S'10 |
| Elise Haley (won CoE SURF award in Summer'06) | B.Sc. in CPE | Boeing, Huntsville, AL | S'07 |
| Jim Marks (won UAH SURF in Summer'06) | B.Sc. in CPE | Raytheon, Huntsville, AL | S'07 |
| John Bland | B.Sc. in CPE | Software Engineering Directorate, Huntsville, AL | S'07 |

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|--|--------------|---|------|
| Chris Otto (<i>advisor Dr. Jovanov</i>) (won 2 nd award at Alabama Launchpad 2007) | M.S. in CPE | Lewis Innovative, Inc., Huntsville, AL; Halo Research, Huntsville, AL | S'06 |
| David Wachira (won CoE-UAH SURF award in Sm'05) | B.Sc. in EE | Adtran, Huntsville, AL | F'05 |
| Brian Trotter | B.Sc. in EE | Dynetics, Huntsville, AL | F'05 |
| Milena Milenkovic (<i>advisor Dr. Jovanov</i>) | Ph.D. in CPE | IBM, Austin, TX | S'05 |
| Austin Rogers | B.Sc. in EE | Dynetics, Huntsville, AL | S'04 |
| The University of Belgrade Belgrade, Serbia | | | |
| Zoran Dimitrijevic (co-advised with Dr. Milutinovic) | B.Sc. in CPE | Ph.D. student at UCSB (worked for Google) | S'00 |
| Igor Ikodinovic | B.Sc. in CPE | University of Belgrade (worked for AMD, Canada) | S'99 |
| Darko Marinov (co-advised with Dr. Milutinovic) | B.Sc. in CPE | Ph.D. student at MIT (Professor at UIUC, USA) | S'99 |
| Davor Magdic (co-advised with Dr. Milutinovic) | B.Sc. in CPE | Ph.D. student at UCSB (worked for Texas Instruments) | S'98 |

Professional Service

Editorial board

[Hindawi. IJDSN] International Journal of Distributed Sensor Networks (06/2010 – 06/2013)

Reviewer, Journals

[IEEE.TED'20] IEEE Transactions on Electron Devices, March 2020.
 [IEEE.TED'19] IEEE Transactions on Electron Devices, November 2019.
 [IEEE.TCAS-I'19] IEEE Transactions on Circuits and Systems I, June 2019.
 [IEEE.TVLSI'19] IEEE Transactions of VLSI Design, May 2019.
 [IEEE.JBHI'18] IEEE Journal of Biomedical and Health Informatics, October 2018.
 [IEEE.TCAS-II'18] IEEE Transactions on Circuits and Systems II, August 2018.
 [IEEE.TCAS-II'18] IEEE Transactions on Circuits and Systems II, May 2018.
 [Elsevier. SUSCOM'17] Sustainable Computing, Informatics and Systems, Elsevier, November 2017.
 [ACM.TOCS'17] ACM Transactions on Computer Systems, January 2017.
 [IET.JoE'16] The Journal of Engineering, May 2016.
 [ACM.TECS'16] ACM Transactions on Embedded Systems, February 2016.
 [ACM.TACO'15] ACM Transactions on Architecture and Code Optimization, October 2015.
 [ACM.TECS'15] ACM Transactions on Embedded Systems, February 2015; November 2015.
 [IIS.JISE'14] Academia Sinica Institute of Information Science, Journal of Information Science and Engineering, September 2014
 [IEEE.Sensors'14] IEEE Sensors Journal, August 2014

| | |
|------------------------------|--|
| [ACM.TECS'14] | ACM Transactions on Embedded Computing Systems, March 2014. |
| [Hidawi. IDJSN'12/'13] | International Journal of Distributed Sensor Networks |
| [IOS.JAISE'13] | Journal of Ambient Intelligence and Smart Environments (IOS Press), February 2012. |
| [IEEE.TITB'12] | IEEE Transactions on Information Technology in BioMedicine; April 2012, October 2012. |
| [IEEE.TE'11] | IEEE Transactions on Education, November 2011. |
| [ACM.TECS'11] | ACM Transactions on Embedded Computer Systems, November 2011. |
| [ACM.TSN'11] | ACM Transactions on Sensor Networks, June 2011. |
| [IEEE.TITB'11] | IEEE Transactions on Information Technology in BioMedicine; March 2011. |
| [IEEE.TE'10] | IEEE Transactions on Education; September 2010. |
| [IEEE.TBCAS'10] | IEEE Transactions of Biomedical Circuits and Systems, August 2010. |
| [InderScience. IJHPSA'10] | International Journal of High Performance Systems Architecture (IJHPSA), September 2009. |
| [IEEE.TITB'09] | IEEE Transactions on Information Technology in Biomedicine, August 2009. |
| [IEEE.TC'09] | IEEE Transactions on Computers, May 2009. |
| [IEEE.TVLSI'09] | IEEE Transactions on VLSI, May 2009. |
| [ACM.CCR'09] | ACM Sigcomm Computer Communications Review, April 2009. |
| [IEEE.TITB'09] | IEEE Transactions on Information Technology in Biomedicine, April 2009. |
| [IEEE.TMC'08] | IEEE Transactions on Mobile Computing, September 2008. |
| [IEEE.TC'08] | IEEE Transactions on Computers, September 2008. |
| [IEEE.TE'08] | IEEE Transactions on Education, June 2008. |
| [IEEE.TITB'08] | IEEE Transactions on Information Technology in Biomedicine, April 2008. |
| [IEEE.TE'08] | IEEE Transactions on Education, February 2008. |
| [Elsevier.MEJ'08] | Elsevier Microelectronics Journal, January 2008. |
| [IEEE.TBCS'07] | IEEE Transactions on Biomedical Circuits and Systems. September 2007. |
| [IEEE.TITB'07] | IEEE Transactions on Information Technology in Biomedicine, May 2007. |
| [ACM.TCS'07] | ACM Transactions on Computer Systems, May 2007. |
| [Elsevier. COMMCOMP'06] | Elsevier Computer Communications, November 2006. |
| [IEEE.TVLSI'06] | IEEE Transactions on VLSI, October 2006. |
| [IEEE.TITB'06] | IEEE Transactions on Information Technology in Biomedicine, October 2006. |
| [IE.IJSN'06] | International Journal on Sensor Networks, Indersciences Enterprise, Ltd., August 2006. |
| [IEEE.TC'06] | IEEE Transactions on Computers, August 2006. |
| [IEEE.TE'06] | IEEE Transactions on Education, August 2006. |
| [IEEE.TVLSI'06] | IEEE Transactions on VLSI, June 2006. |
| [ACM.TACO'06] | ACM Transactions on Architecture and Code Optimization, April 2006. |
| [IEEE.TC'06] | IEEE Transactions on Computers, February 2006. |
| [IEEE.TE'05] | IEEE Transactions on Education, November 2005. |
| [Elsevier. COMMCOMP'05] | Elsevier Computer Communications, October 2005. |

- [IEEE.COMM'05] IEEE Communications Magazine, September 2005.
- [IOS.JEC'05] Journal on Embedded Computing, March 2005.
- [IEEE.TVLSI'05] IEEE Transactions on VLSI, March 2005.
- [IEEE.TE'04] IEEE Transactions on Education, November 2004.
- [IEEE.TVLSI'04] IEEE Transactions on VLSI, October 2004.
- [IEEE.TE'04] IEEE Transactions on Education, August 2004.
- [IEEE.TITB'04] IEEE Transactions on Information Technology in BioMedicine, March 2004.
- [IEEE.TITB'03] IEEE Transactions on Information Technology in BioMedicine, November 2003.
- [BCS.BCJ'03] The British Computer Journal, 2003.
- [IEEE.CONC'00] IEEE Concurrency, special issue on Caching in Distributed Systems, June 2000.
- [IEEE.Micro'00] IEEE Micro, special issue on Computer Architecture Education, 2000.
- [IEEE.PIEEE'99] Proceedings of the IEEE, special issue on Distributed Shared Memory, 1999.

Reviewer, Conferences

- [IEEE.SE'19] IEEE Southeast Con, Raleigh, NC, U.S.A., April 12-15, 2020. <https://attend.ieee.org/southeastcon-2020/>
- [IEEE.SE'19] IEEE Southeast Con, Huntsville, AL, U.S.A., April 11-14, 2019. <http://sites.ieee.org/southeastcon2019/>
- [IEEE.EMBC'19] 41th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Berlin, Germany, July 23-27, 2019. <http://embc.embs.org/2019/>
- [IEEE.EMBC'18] 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Honolulu, HI, USA, July 17-21, 2018. <http://embc.embs.org/2018/>
- [IEEE.EMBC'17] 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Jeju Island, Korea, July 11-15, 2017. <http://embc.embs.org/2017/>
- [Springer. EuroPar'17] 23rd International European Conference on Parallel and Distributed Computing, Aug 28 – Sep 1, Santiago de Compostela, Galicia, Spain, 2017.
- [IEEE.MSE'17] International Conference on Microelectronic Systems Education, Lake Louise, Canada, May 11-12, 2017 (<https://mse.soe.ucsc.edu/committees>).
- [HiPEAC.WRC'17] 11th HiPEAC Workshop on Reconfigurable Computing (WRC 2017), Stockholm, Sweden, January 23-25, 2017 (<https://www.hipeac.net/events/activities/7441/wrc/>).
- [IEEE.EMBC'16] 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'16), Orlando, FL.
- [PEC'16] International Conference on Pervasive and Embedded Computing, PEC 2016, Lisbon, Portugal, July 25-27, 2016; <http://www.pec.peccs.org/ProgramCommittee.aspx>
- [HiPEAC.WRC'16] 10th HiPEAC Workshop on Reconfigurable Computing (WRC 2016), Berlin, Germany, January 19, 2016 (<http://paginas.fe.up.pt/~specs/events/wrc2016/>).
- [IEEE. HealthCom'15] 17th International Conference on E-health, Networking, Application & Services (HealthCom'15), October 14-17, 2015, Boston, MA.
- [IEEE.EMBC'15] 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'15).
- [ACM/IEEE. WCAE'15] Workshop on Computer Architecture Education, Held in conjunction with 42nd International Symposium on Computer Architecture, Portland, OR, Saturday, 13 June 2015 <http://www4.ncsu.edu/~efg/wcae2015.html>
- [IEEE.UbiHealth'15] UbiHealth Tech 2015: 2nd International Symposium on Future Information and Communication Technologies for Ubiquitous Health Care, May 28–October 30, 2015 Beijing, China. <http://www.ubi-health.org/>
- [IEEE.MSE'15] International Conference on Microelectronic Systems Education, Pittsburgh, PA, May 20-21, 2015

- (<http://www.mseconference.org/>; <https://mse.soe.ucsc.edu/committees>).
- [IEEE.EMBC'14] 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'14).
- [ACM.PPoPP'13] PPoPP 2014: 19th ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming.
- [IEEE/ACM. BodyNets'13] BodyNets 2013: 8th International Conference on Body Area Networks, September 30–October 2, 2013 Boston, Massachusetts, United States.
- [IEEE.MSE'13] International Conference on Microelectronic Systems Education, June 2-3, Austin, Texas (<http://www.mseconference.org/>).
- [IEEE.EMBC'13] 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'13).
- [HiPEAC-WRC'13] 7th HiPEAC Workshop on Reconfigurable Computing (WRC 2013), Berlin, Germany, January 21, 2013 (http://www.cad.polito.it/research/!_EVENTS/WRC_2013/WRC_2013_-_Home_Page.html).
- [IEEE.EMBC'12] IEEE Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS).
- [HiPEAC-WRC'12] 6th HiPEAC Workshop on Reconfigurable Computing (WRC 2012), Paris, France, January 2012 (http://www.cad.polito.it/~sterpone/WRC_2012/WRC_2012_-_Home_Page.html).
- [IEEE.EMBS'11] IEEE Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS).
- [IEEE.VTC'11] IEEE Vehicular Technology Conference, May 2011.
- [ACM.DAC'11] ACM Design Automation Conference, January 2011.
- [IEEE.MSE'11] Microelectronics System Education (MSE'09), San Diego, CA, Jun 2011.
- [ACM.WCAE'11] Workshop on Computer Architecture Education Held in conjunction with High Performance Computer Architecture 17, San Antonio, TX, February 2011.
- [HiPEAC-WRC'11] 5th HiPEAC Workshop on Reconfigurable Computing (WRC 2011), Heraklion, Crete, Greece, January 2011 (http://hipeac.ac.upc.edu/WRC/HiPEACRC_WS_2011/).
- [IEEE'SSST.10] IEEE Southeastern Symposium on System Theory, Tyler, TX, March 2010.
- [HiPEAC-WRC'10] WRC 2010 4th HiPEAC Workshop on Reconfigurable Computing, Pisa, Italy, January 2010 (http://ce.et.tudelft.nl/HiPEACRC_WS/HiPEACRC_WS_2010/).
- [MEDEA'09] Memory performance: Dealing with Applications, Systems and Architecture, held in conjunction with MEDEA 2009 Workshop, held in conjunction with PACT 2009 Conference Sept. 12-16 2009, Raleigh, North Carolina.
- [IEEE.MSE'09] 2009 International Conference on Microelectronic Systems Education, 25-27 July 2009, San Francisco, CA.
- [IEEE.MEDEA'08] Memory performance: Dealing with Applications, Systems and Architecture, held in conjunction with PACT 2008 Conference, Oct. 25-28 2008, Toronto, Canada.
- [IEEE.SSST'09] IEEE Southeastern Symposium on System Theory. 41st IEEE Southeastern Symposium on System Theory (SSST'09), Tullahoma, TN, USA, March 15-17, 2009.
- [WCAE'08] WCAE-08: Workshop on Computer Architecture Education Held in conjunction with the 34th International Symposium on Computer Architecture, Beijing, China, June 21, 2008.
- [IEEE.SECON'08] IEEE SoutheastCon 2008.
- [IEEE.SAMOS'08] SAMOS VIII: International Symposium on Systems, Architectures, Modeling and Simulation Samos, Greece, July 21-24, 2008.
- [MEDEA'07] Memory performance: Dealing with Applications, Systems and Architecture, held in conjunction with PACT 2007 Conference, Sept. 15-19 2007, Brasov, Romania.
- [WCAE'07] WCAE-07: Workshop on Computer Architecture Education Held in conjunction with the 34th International Symposium on Computer Architecture San Diego, CA, June 9, 2007.
- [IEEE.SAMOS'07] SAMOS VII: International Symposium on Systems, Architectures, Modeling and Simulation Samos, Greece, July 16-19, 2007.

- [IEEE.MSE'07] MSE 2007: 2007 International Conference on Microelectronic Systems Education June 3-4, 2007, San Diego, California.
- [MEDEA'06] Memory performance: Dealing with Applications, Systems and Architecture, held in conjunction with PACT 2006 Conference, Sept. 16-20 2006, Seattle, WA.
- [WCAE'06] Workshop on Computer Architecture Education, Boston, MA, June 2006.
- [ERSA'06] Engineering of Reconfigurable Systems and Algorithms, The 2006 International MultiConference in Computer Science & Computer Engineering, June 2006, Las Vegas, Nevada.
- [MEDEA'05] Memory performance: Dealing with Applications, Systems and Architecture, held in conjunction with PACT 2005 Conference, Sept. 17- 21, 2005, Saint Louis, Missouri.
- [ERSA'05] Engineering of Reconfigurable Systems and Algorithms, The 2005 International MultiConference in Computer Science & Computer Engineering, June 2005, Las Vegas Nevada.
- [IEEE.MSE'05] International Conference on Microelectronic Systems Education, June 2005, Anaheim, California.
- [IEEE. Globecom'05] Globecom 2005, Computer and Network Security.
- [ACMSE'05] ACM South East Conference, March 2005, Kennesaw, Georgia.
- [ERSA'04] Engineering of Reconfigurable Systems and Algorithms, The 2004 International MultiConference in Computer Science & Computer Engineering, June 21-24, 2004, Las Vegas, Nevada.
- [ACMSE'04] ACM South East Conference 2004, Huntsville, Alabama, April 1-2, 2004.
- [PDCS'03] ISCA's 16th International Conference on Parallel and Distributed Computing Systems, Reno, NV, 2003.
- [MEDEA'02] Workshop on Chip Multiprocessors: Processor Architecture and Memory Hierarchy Related Issues, 2002.
- [MICRO'02] 35th Annual International Symposium on Microarchitecture, 2002.
- [HICSS'01] 34th Hawai'i International Conference on System Sciences), 2001.
- [ETRAN'97-99] A major Yugoslav Conference For Electronics, Telecommunications, Computers, Automation, and Nuclear Engineering.

Program Committee Member (Conferences/Workshops)

- [Springer. BalkanCom'19] BalkanCom'19, Third International Balkan Conference on Communications and Networking, Skopje, North Macedonia, June 10-12, 2019, <http://www.balkancom.info/2019/committees.html>
- [IEEE.EMBC'19] 41th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Berlin, Germany, July 23-27, 2019. <http://embc.embs.org/2019/>
- [IEEE.EMBC'18] 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Honolulu, HI, USA, July 17-21, 2018. <http://embc.embs.org/2018/>
- [IEEE.EMBC'17] 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Jeju Island, Korea, July 11-15, 2017. <http://embc.embs.org/2017/>
- [IEEE.MSE'17] International Conference on Microelectronic Systems Education, Lake Louise, Canada, May 11-12, 2017 (<https://mse.soe.ucsc.edu/committees>).
- [HiPEAC.WRC'17] 11th HiPEAC Workshop on Reconfigurable Computing (WRC 2017), Stockholm, Sweden, January 23-25, 2017 (<https://www.hipeac.net/events/activities/7441/wrc/>).
- [PEC'16] International Conference on Pervasive and Embedded Computing, PEC 2016, Lisbon, Portugal, July 25-27, 2016; <http://www.pec.peccs.org/ProgramCommittee.aspx>
- [IEEE.EMBC'16] 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'16); Associate Editor.
- [HiPEAC.WRC'16] 10th HiPEAC Workshop on Reconfigurable Computing (WRC 2013), Berlin, Germany, January 19, 2016 (<http://paginas.fe.up.pt/~specs/events/wrc2016/>).

- [IEEE. HealthCom'15] 17th International Conference on E-health, Networking, Application & Services (HealthCom'15), October 14-17, 2015, Boston, MA.
- [IEEE.EMBC'15] 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'15).
- [ACM/IEEE. WCAE'15] Workshop on Computer Architecture Education, Held in conjunction with 42nd International Symposium on Computer Architecture, Portland, OR, Saturday, 13 June 2015
<http://www4.ncsu.edu/~efg/wcae2015.html>
- [IEEE.UbiHealth'15] UbiHealth Tech 2015: 2nd International Symposium on Future Information and Communication Technologies for Ubiquitous Health Care, May 28–October 30, 2015 Beijing, China.
<http://www.ubi-health.org/>
- [IEEE.MSE'15] International Conference on Microelectronic Systems Education, Pittsburgh, PA, May 20-21, 2015 (<http://www.mseconference.org/>; <https://mse.soe.ucsc.edu/committees>).
- [IEEE.EMBC'14] Associate Editor, 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'14).
- [IEEE/ACM. BodyNets'13] BodyNets 2013: 8th International Conference on Body Area Networks, September 30–October 2, 2013 Boston, Massachusetts, United States.
- [IEEE.MSE'13] International Conference on Microelectronic Systems Education, June 2-3, Austin, Texas (<http://www.mseconference.org/>).
- [IEEE.EMBS'13] Associate Editor, 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'13).
- [HiPEAC-WRC'13] 7th HiPEAC Workshop on Reconfigurable Computing (WRC 2013), Berlin, Germany, January 21, 2013 (http://www.cad.polito.it/research/!_EVENTS/WRC_2013/WRC_2013_-_Home_Page.html).
- [IEEE.EMBS'12] Associate Editor, IEEE Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS).
- [HiPEAC-WRC'12] 6th HiPEAC Workshop on Reconfigurable Computing (WRC 2012), Paris, France, January 2012 (http://www.cad.polito.it/~sterpone/WRC_2012/WRC_2012_-_Home_Page.html).
- [IEEE.EMBS'11] Associate Editor, IEEE Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS).
- [IEEE.MSE'11] Microelectronics System Education (MSE'09), San Diego, CA, Jun 2011.
- [ACM.WCAE'11] Workshop on Computer Architecture Education Held in conjunction with High Performance Computer Architecture 17, San Antonio, TX, February 2011.
- [HiPEAC-WRC'11] 5th HiPEAC Workshop on Reconfigurable Computing (WRC 2011), Heraklion, Crete, Greece, January 2011 (http://hipeac.ac.upc.edu/WRC/HiPEACRC_WS_2011/).
- [HiPEAC-WRC'10] WRC 2010 4th HiPEAC Workshop on Reconfigurable Computing, Pisa, Italy, January 2010 (http://ce.et.tudelft.nl/HiPEACRC_WS/HiPEACRC_WS_2010/).
- [MEDEA'09] Memory performance: Dealing with Applications, Systems and Architecture, held in conjunction with MEDEA 2009 Workshop, held in conjunction with PACT 2009 Conference, Sept. 12-16 2009, Raleigh, North Carolina.
- [MSE'09] 2009 International Conference on Microelectronic Systems Education, 25-27 July 2009, San Francisco, CA.
- [WCAE'09] Workshop on Computer Architecture Education Held in conjunction with the 42nd Annual International Symposium on Microarchitecture, New York, NY, December 2009.
- [WCAE'08] WCAE-08: Workshop on Computer Architecture Education Held in conjunction with the 34th International Symposium on Computer Architecture, Beijing, China, June 21, 2008.
- [IEEE.SAMOS'08] SAMOS VIII: International Symposium on Systems, Architectures, Modeling and Simulation Samos, Greece, July 21-24, 2008.
- [MEDEA'07] Memory performance: Dealing with Applications, Systems and Architecture, held in conjunction with PACT 2007 Conference, Sept. 15-19 2007, Brasov, Romania.

- [WCAE'07] WCAE-07: Workshop on Computer Architecture Education Held in conjunction with the 34th International Symposium on Computer Architecture San Diego, CA Saturday, June 9, 2007.
- [IEEE.SAMOS'07] SAMOS VII: International Symposium on Systems, Architectures, Modeling and Simulation Samos, Greece, July 16-19, 2007.
- [IEEE.MSE'07] MSE 2007: 2007 International Conference on Microelectronic Systems Education June 3-4, 2007, San Diego, California.
- [MEDEA'06] Memory performance: Dealing with Applications, Systems and Architecture, held in conjunction with PACT 2006 Conference, Sept. 16-20 2006, Seattle, WA.
- [WCAE'06] Workshop on Computer Architecture Education, Boston, MA, June 2006.
- [ERSA'06] Engineering of Reconfigurable Systems and Algorithms, The 2006 International MultiConference in Computer Science & Computer Engineering, June 2006, Las Vegas, Nevada.
- [MEDEA'05] Memory performance: Dealing with Applications, Systems and Architecture, held in conjunction with PACT 2005 Conference Sept. 17- 21 2005, Saint Louis, Missouri.
- [IEEE.MSE'05] International Conference on Microelectronic Systems Education, June 2005, Anaheim, California, <http://www.mseconference.org/>.
- [ERSA'05] Engineering of Reconfigurable Systems and Algorithms, The 2005 International MultiConference in Computer Science & Computer Engineering, June 2005, Las Vegas, Nevada.
- [MEDEA'03] MEDEA Workshop On Chip Multiprocessors: Processor Architecture and Memory Hierarchy related Issues, Held in conjunction with PACT, September 2003, New Orleans, Louisiana, <http://garga.iet.unipi.it/medea03/>.
- [MEDEA'02] MEDEA Workshop On Chip Multiprocessors: Processor Architecture and Memory Hierarchy related Issues, Held in conjunction with PACT, September 2002, Charlottesville, Virginia, <http://garga.iet.unipi.it/medea/>.

Panels, External Reviewer for Funding Agencies, Book Publishers

- [AAA'18] **External reviewer/Panelist** for the American Association for the Advancement of Science (AAAS) – Research Competitiveness Program (KACST), January 2018.
- [CIF'16] **External reviewer** for the Canada Innovation Fund, December 2016.
- [AAA'16] **External reviewer** for the American Association for the Advancement of Science (AAAS) – Research Competitiveness Program (KACST), May 2016.
- [NSF'15] **Panelist** for NSF, January 2015.
- [AAA'14] **External reviewer** for the American Association for the Advancement of Science (AAAS) – Research Competitiveness Program (KACST), December 2014.
- [AAA'13] **External reviewer** for the American Association for the Advancement of Science (AAAS) – Research Competitiveness Program (KACST), November 2013.
- [AAAS'12] **External reviewer** for the American Association for the Advancement of Science (AAAS) – Research Competitiveness Program (KACST), March 2012.
- [US.VA'11] **External reviewer**, The Department of Veteran Affairs, December 2011.
- [NL.SWT'11] **Consultant**, Technology Foundation STW, The Netherlands, June 2011.
- [NL.SWT'10] **Consultant**, Technology Foundation STW, The Netherlands, January 2011.
- [Sg.MoH'10] **External reviewer**, Ministry of Health, Singapore, September 2010.
- [NSF'09] **Panelist** for NSF, November 2009.
- [Cons.SV'08] **Consultant, Senior Vitals Inc.**, May/June 2008.
- [AWP'08] **Reviewer** for a VLSI book for Addison Wesley Publishing, March 2008.
- [HK'07] **Reviewer** for Innovation and Technology Commission of the Hong Kong Special Administration Region Government, November 2007.
- [TE'07] **Reviewer** for a microprocessor textbook for Thompson Engineering, December 2006.

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| [OUP'06] | Reviewer for a microprocessor textbook for Oxford University Press, December 2006. |
| [Wiley'06] | Reviewer for The Handbook of Computer Networks, February 2006. |
| [OUP'05] | Reviewer for a microprocessor textbook for Oxford University Press, November 2005. |
| [MTC'04] | External reviewer for Maryland Technological Corporation, August 2004. |
| [NSF'04] | Ad-hoc reviewer for NSF, August 2004. |
| [NSF'04] | Panelist for NSF, May 2004. |
| [SFI'04] | External reviewer for Science Foundation IRELAND (SFI), February 2004 |

University Service

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|----------------|--------------|---|
| ECE.SC'20 | 2019/20 | ECE Dept. Search Committee Chair (Lecturer position) |
| CoE.PTAC'18/19 | 2018/19 | College of Engineering, Promotion and Tenure Award Committee |
| CoE.PTAC'17/18 | 2017/18 | College of Engineering, Promotion and Tenure Award Committee |
| ECE.SC'17/18 | 2017/18 | ECE Dept., Search Committee Chair (successful hire of an Assistant Professor in CPE) |
| ECE.EEConc'16 | 2017 | ECE Dept., New Concentrations for EE Program Committee Chair |
| CoE.PTAC'16/17 | 2016/2017 | College of Engineering, Promotion and Tenure Award Committee |
| ECE.SC'15 | 2015/2016 | ECE Dept. Search Committee Chair (successful hire of an Assistant Professor in EE) |
| CoE.PTAC'15 | 2015/2016 | College of Engineering, Promotion and Tenure Award Committee |
| UAH.IIDR'15 | 2015 | UAH IIDR Program Committee Member |
| CoE.PTAC'14 | 2014/2015 | College of Engineering, Promotion and Tenure Award Committee |
| ECE.SC'14 | 2014/2015 | ECE Dept. Search Committee Member (3 new positions) |
| CPE.PC | 2011-present | Computer Engineering Program Coordinator |
| CoE.CC | 2013-present | College of Engineering, Curriculum Committee (Undergrad/Grad) |
| ECE.HKN | 2005-present | Eta Kappa Nu Theta Eta Chapter Academic Advisor |
| UAH.SNT'9 | 2009-2011 | Faculty Senate, ECE representative |
| UAH.S-PC | 2009-2011 | Faculty Senate, Personnel Committee |
| UAH.GC | 2009-2011 | Graduate Council (CoE representative) |
| ECE.ISC | 2010 | ECE Chair Internal Search Committee (Committee Chair) |

Honors, Awards, Special Recognitions

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| [INSTICC.PECCS'16a] | Best student paper award. |
| [IEEE.ICCCN'15] | Best paper nominee. |
| [IEEE.HSV'15] | IEEE Huntsville Section Outstanding Educator 2015, February 2015. |
| [CoE.OSFA'14] | The College of Engineering National Engineer's Week Outstanding Senior Faculty Award, February 2014. |
| [CoE.OF'13] | The College of Engineering Outstanding Faculty Award, May 2013. |
| [ACM.CASES'10] | Best paper award at ACM CASES'10, October 2010. |
| [CoE.OAP'05] | The College of Engineering Outstanding Assistant Professor Award, February 2005. |
| [SSF'89-94] | Serbia Science Foundation Scholarship. |
| [SerMPA'87] | Mihailo Petrovic Alas Diploma; Highest High School award in Serbia for achievements in mathematics and physics. |
| [SerVSK'87] | Vuk Stefanovic Karadzic Diploma; Highest High School award in Serbia for overall academic achievements. |

[YuPhys'86] 3rd Place in Physics Competition in former Yugoslavia.

Memberships

IEEE, IEEE Computer Society (elected Senior Member in 2010)

ACM, ACM SIGARCH (Special Interest Group on Computer Architecture),

ACM SIGBED (Special Interest Group on Embedded Systems), Tau Beta Pi, Eta Kappa Nu (Advisor).