DJORDJE JEVDJIC

Curriculum Vitae

CONTACT INFORMATION

University of Washington
Computer Science and Engineering
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RESEARCH INTERESTS

- **Broad:** Computer architecture and computer systems
- **Current focus:** Specialized storage systems for multimedia, approximate computing, memory systems and near-memory processing, hardware specialization/heterogeneity

EDUCATION

- Ecole Polytechnique Fédérale de Lausanne (EPFL) — Lausanne, Switzerland
  Ph.D., Computer Science, GPA: 5.9/6.0 — Sep 2015
  Thesis: "Multi-Gigabyte On-Chip DRAM Caches for Servers"
  Advisor: Prof. Babak Falsafi
- University of Belgrade — Belgrade, Serbia
  M.S., Computer Science, GPA: 10.0/10.0 — Apr 2010
- University of Belgrade — Belgrade, Serbia
  B.S., Electrical and Computer Engineering, GPA: 10.0/10.0 — Sep 2007

GRANTS AND AWARDS

- "Early Postdoc.Mobility" Fellowship grant by the Swiss National Science Foundation for 2015-2017
- Intel Doctoral Student Honor Fellowship for 2013-2014
- IEEE Micro Top Picks from Computer Architecture Conferences of 2013, "A Case for Specialized Processors for Scale-Out Workloads", 2014
- Best Paper Award at ASPLOS for "Clearing the Clouds: A Study of Emerging Scale-Out Workloads on Modern Hardware", 2012
- Serbian State Scholarship Foundation Fellowship, for 2006-2013
- Distinguished Student Award by the Serbian Association of Professors and Scientists, 2007
- Award for the Best Student of the Generation, School of Electrical and Computer Engineering, University of Belgrade, 2007

PROFESSIONAL EXPERIENCE

- Postdoctoral Research Fellow, University of Washington, Computer Science and Engineering Department (Oct 2015 – present)
- Research and Teaching Assistant, EPFL, School of Computer and Communication Sciences (Sep 2009 – Sep 2015)

- Teaching Assistant, University of Belgrade, Electrical and Computer Engineering Department (Jan 2008 – Sep 2009)
- Data Collection & Labeling Associate, Microsoft Development Center Serbia (Nov 2007 – Feb 2008)
- Intern, Barcelona Supercomputing Center (Sep 2007 – Nov 2007)

CONFERENCE PUBLICATIONS

- **Djordje Jevdjic**, Karin Strauss, Luis Ceze, and Henrique Malvar. Approximate Storage of Compressed and Encrypted Videos. In *International Conference on Architectural Support for Operating Systems and Programming Languages (ASPLOS)*, April 2017 (to appear)
- Javier Picorel, **Djordje Jevdjic**, and Babak Falsafi. Near-Memory Address Translation. *Submitted for publication*. https://arxiv.org/abs/1612.00445, November 2016
- **Djordje Jevdjic**, Cansu Kaynak, Gabriel Loh, and Babak Falsafi. Unison Cache: A Scalable and Effective DRAM Cache. In *International Symposium on Microarchitecture (MICRO)*, December 2014
- **Djordje Jevdjic**, Stavros Volos, and Babak Falsafi. Die-Stacked DRAM Caches for Servers: Hit Ratio, Latency, or Bandwidth? Have It All with Footprint Cache. In *International Symposium on Computer Architecture (ISCA)*, June 2013
- Pinar Tozun, Ippokratis Pandis, Cansu Kaynak, **Djordje Jevdjic**, and Anastasia Ailamaki. From A to E: Analyzing TPC's OLTP Benchmarks - the Obsolete, the Ubiquitous, the Unexplored. In *International Conference on Extending Database Technology (EDBT)*, March 2013
- Dragomir Milojevic, Sachin Idgunji, **Djordje Jevdjic**, Emre Ozer, Pejman Lotfi-Kamran, Andreas Panteli, Andreas Prodromou, Chrysostomos Nicopoulos, Damien Hardy, Babak Falsafi, and Yannis Sazeides. Thermal Characterization of Cloud Workloads on a Power-Efficient Server-on-Chip. In *International Conference on Computer Design (ICCD)*, September 2012
- Pejman Lotfi-Kamran, Boris Grot, Michael Ferdman, Stavros Volos, Onur Kocberber, Javier Picorel, Almutaz Adileh, **Djordje Jevdjic**, Sachin Idgunji, Emre Ozer and Babak Falsafi. Scale-Out Processors. In *International Symposium on Computer Architecture (ISCA)*, June 2012
- Michael Ferdman, Almutaz Adileh, Onur Kocberber, Stavros Volos, Mohammed Alisafaee, **Djordje Jevdjic**, Cansu Kaynak, Adrian Popescu, Anastasia Ailamaki, and Babak Falsafi. Clearing the Clouds: A Study of Emerging Scale-Out Workloads on Modern Hardware. In *International Conference on Architectural Support for Operating Systems and Programming Languages (ASPLOS)*, March 2012 (**best paper award**)

JOURNAL ARTICLES

- Stavros Volos, **Djordje Jevdjic**, Babak Falsafi, and Boris Grot. Fat Caches for Scale-Out Servers. In *IEEE Micro*, March/April 2017
- Michael Ferdman, Almutaz Adileh, Onur Kocberber, Stavros Volos, Mohammed Alisafaee, **Djordje Jevdjic**, Cansu Kaynak, Adrian Popescu, Anastasia Ailamaki, and Babak Falsafi. A Case for Specialized Processors for Scale-Out Workloads. In *IEEE Micro Top Picks,* May/June 2014
- Michael Ferdman, Almutaz Adileh, Onur Kocberber, Stavros Volos, Mohammed Alisafaee, **Djordje Jevdjic**, Cansu Kaynak, Adrian Popescu, Anastasia Ailamaki, and Babak Falsafi. Quantifying the Mismatch Between Emerging Scale-Out Applications and Modern Processors. In *ACM Transaction on Computer Systems,* November 2012

WORKSHOPS

- **Djordje Jevdjic**, Luis Ceze, Karin Strauss, and Henrique Malvar. CloudApp: Approximate Cloud Store for Multimedia. In *Workshop on Approximate Computing Across the Stack* (WAX 2016), in conjunction with ASPLOS, April 2016

TEACHING ASSISTANTSHIPS

- *Principles of Computer Systems* (graduate), EPFL (Fall '14)
- *Introduction to Multicore Architectures* (undergraduate), EPFL (Spring '12)
- *Theoretical Computer Science* (undergraduate), EPFL (Spring '11)
- *Advanced Multicore Architectures* (graduate), EPFL, (Fall '10)
- *Computer Systems Performance Analysis* (undergraduate), Univ. of Belgrade (Spring '08, Spring '09)
- *Algorithms and Data Structures* (undergraduate), Univ. of Belgrade (Spring '08, Spring '09)
- *Internet Application Programming* (undergraduate), Univ. of Belgrade (Spring '08, Fall '08, Spring '09)
- *Processor Microarchitecture* (undergraduate), Univ. of Belgrade (Spring '08, Fall '08, Spring '09)
- *Foundations of Programming* (undergraduate), Univ. of Belgrade (Fall '08)

PROFESSIONAL SERVICE

- ACM and IEEE member
- Program Committee member: Workshop on Approximate Computing Across the Stack (WAX 2017), Workshop on Near-Data Processing (WoNDP 2015)
- Journal reviewer: ACM Transactions on Computer Systems, ACM Transactions on Architecture and Code Optimizations, IEEE Micro, IEEE Computer Architecture Letters, IEEE Embedded Systems Letters, IEEE Transactions on VLSI
- External conference reviewer: MICRO'16, ISCA'16, ISCA'15, HPCA'15, MemForum'14, IISWC'14, ASPLOS'14, HPCA'14, HPCA'13, IISWC'11, DATE'11, ICS'11
- Co-architect of *CloudSuite*, a benchmark suite for scale-out applications
- Co-developer of *Flexus,* a full-system multi-processor simulation framework, 2010 – 2015
- *CloudSuite on Flexus* tutorial (aka *Rigorous and Practical Server Design Evaluation*):
  – EPFL, with C. Kaynak, O. Kocberber, J. Picorel, and S. Volos, February 2015
  – ISCA 2013, with A. Daglis and C. Kaynak, June 2013

MISCELLANEOUS

- Languages: English, Serbo-Croatian, French (intermediate)
- Hobbies: music (playing the guitar, singing in choirs), sports, philosophy, mindfulness meditation