Hoda Aghaei Khouzani

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Education

2013-Now | PhD | University of Delaware | Major: Computer Engineering 2008-2010 | M.Sc. | Sharif University of Technology | Major: Computer Engineering 2003-2008 | B.Sc. | Iran University of Science and Technology | Major: Computer Engineering

Experience

Research Assistant

- **2013-Now** | Working under the supervision of Prof. Chengmo Yang on developing the runtime optimizations for non-volatile memories and storage systems.
- **2009-2011** | In VLSI Lab, Department of Computer Engineering, Sharif University of Technology (SUT), Focused on Scalability of Optical Network-on-Chip
- **2008-2009** | In Telecommunication Research Center's projects in Iran University of Science and Technology (IUST)

Teaching Assistant

Fall 2014 | CSIS 450 | Computer Networks I, University Of Delaware
Fall 2014 | CPEG 323 | Introduction to Computer Systems Engineering, University of Delaware
Spring 2010 | CE 40307 | Digital Circuit Laboratory, Sharif University of Technology

Developer

2011-2013 | Worked as Programmer and Project Manager in Pulseware Company – Designed applications to monitor and analysis ATMs and POSs Networks and Transactions

Skills

Programming Languages

• C++, C#, Python, SQL, Java, VHDL, Verilog

Simulators and Design Tools

• Gem5, DiskSim, NVSim, Pin, SimpleScalar, Octave, MS Visual Studio

Courses

- Fall 2016 | Machine Learning, On Coursera, presented by Stanford University
- Fall 2013 | Algorithm Design and Analysis, University of Delaware
- Fall 2013 | Principles of Parallel Computer Architecture, University of Delaware

Publications

Journals

- 1. **H. Aghaei Khouzani**, Fateme S. Hosseini, and C. Yang, "Segment and Conflict Aware Page Allocation and Migration in DRAM-PCM Hybrid Main Memory", to appear in IEEE Trans. On Computer-aided Design of Integrated Circuits and System (TCAD), 2016.
- 2. H. Aghaei Khouzani, Y. Xue, and C. Yang, "Fully Exploiting PCM Write Capacity within Near Zero Cost through Segment-based Page Allocation," in ACM Journal on Emerging Technologies in Computer Systems (JETC), 2016, Vo 12, No. 4.

Conferences

- 1. **H. Aghaei Khouzani**, P. Fotouhi, C. Yang, and G. R. Gao, "Leveraging Access Port Positions to Accelerate Page Table Accesses in DWM Main Memory", to appear in Design Automation and Test in Europe (DATE), 2017. (Acceptance Rate:24%)
- 2. C. Liu, **H. Aghaei Khouzani**, and C. Yang, "ErasuCrypto: A Light-Weight Secure Data Deletion Scheme for Solid State Drivers", to appear in Privacy Enhancing Technologies (PoPETs/PETs), 2017.
- 3. **H. Aghaei Khouzani** and C. Yang, "Towards a Scalable and Write-free Multi-version Checkpointing Scheme in Solid State Drives," in International Conference on Dependable Systems and networks (DSN), 2016, pp. 37-48. (Acceptance Rate:22%)
- 4. **H. Aghaei Khouzani**, C. Yang, and J. Hu, "Improving Performance and Lifetime of DRAM-PCM Hybrid Main Memory through a Proactive Page Allocation Strategy," in 20th Asia and South Pacific Design Automation Conference (ASP-DAC), 2015, pp. 508-513. (Acceptance Rate:34%)
- 5. **H. Aghaei Khouzani**, Y. Xue, C. Yang, and A. Pandurangi, "Prolonging PCM Lifetime through Energyefficient, Segment-aware, and Wear-resistant Page Allocation," in International Symposium on Low Power Electronics and Design (ISLPED), 2014, pp. 327-330. (Acceptance Rate:34%)
- H. Aghaei Khouzani, S. Koohi, S. Hessabi, "Fully Contention-Free Optical NoC Based on Wavelenght Routing" in The 16th CSI International Symposiums On Computer Architecture & Digital Systems (CADS), 2012, pp. 81 – 86.

Awards

- 2017 | University Doctoral Fellowship Award for the 2017-2018 academic Year (UD)
- 2016 A. Richard Newton Young Student Fellow Program, Design Automation Conference (DAC)
- **2016** | Electrical and Computer Engineering Research Day Outstanding Project Award in Women in Engineering, University of Delaware (UD)
- 2015 | Computer Systems and Networking Graduate Faculty Award, University of Delaware (UD)
- **2014** | Electrical and Computer Engineering Research Day Outstanding Project Award in Women in Engineering, University of Delaware (UD)

Organizations

2016-Now | Women in Engineering at the University of Delaware

Electrical and Computer Engineering representative