Yunqi Zhang

Computer Science and Engineering Department (BBB) 2753
University of Michigan, Ann Arbor, MI 48109
http://eecs.umich.edu/∼yunqi/
yunqi@umich.edu

EDUCATION

Doctor of Philosophy, in Computer Science and Engineering
University of Michigan, Ann Arbor — 2013 - Present
- Advisors: Prof. Lingjia Tang, Prof. Jason Mars

Master of Science, in Computer Science and Engineering
University of Michigan, Ann Arbor — 2013 - 2015

Master of Science, in Computer Science and Engineering — Completed 44 credits
University of California, San Diego — 2012 - 2013

Bachelor of Science, in Software Engineering — Graduated with honors
Beijing Institute of Technology — 2008 - 2012

PUBLICATIONS

Yunqi Zhang, David Meisner, Jason Mars, Lingjia Tang. Treadmill: Attributing the Source of Tail Latency through Precise Load Testing and Statistical Inference. *Proceedings of the 43rd ACM/IEEE International Symposium on Computer Architecture.* **(ISCA 2016)**

Michael A. Laurenzano, Yunqi Zhang, Jiang Chen, Lingjia Tang, Jason Mars. Identifying and Manging Non-Criticality in Units for HW/SW Co-Designed Processors. *Proceedings of the 43rd ACM/IEEE International Symposium on Computer Architecture.* **(ISCA 2016)**

Johann Hauswald, Michael A. Laurenzano, Yunqi Zhang, Hailong Yang, Yiping Kang, Cheng Li, Austin Rovinski, Arjun Khurana, Ronald G. Dreslinski, Trevor Mudge, Vinicius Petrucci, Lingjia Tang, Jason Mars. The Implications on Future Warehouse Scale Computers using Sirius, An Open End-to-End Voice and Vision Personal Assistant. *ACM Transactions on Computer Systems, November 2015.* **(TOCS 2015)**

Johann Hauswald, Michael A. Laurenzano, Yunqi Zhang, Cheng Li, Austin Rovinski, Arjun Khurana, Ronald G. Dreslinski, Vinicius Petrucci, Trevor Mudge, Lingjia Tang, Jason Mars. Sirius: An Open End-to-End Voice and Vision Personal Assistant and Its Implications for Future Warehouse Scale Computers. *Proceedings of the 20th International Conference on Architectural Support for Programming Languages and Operating Systems.* **(ASPLOS 2015)**
IEEE Micro Top Picks

Chang-Hong Hsu, Yunqi Zhang, Michael A. Laurenzano, David Meisner, Thomas Wenisch, Lingjia Tang, Jason Mars, Ronald G. Dreslinski. Adrenaline: Pinpointing and Reining in Tail Queries with Quick Voltage Boosting. *Proceedings of the 2015 IEEE 21st International Symposium on High Performance Computer Architecture.* **(HPCA 2015)**

Vinicius Petrucci, Michael A. Laurenzano, John Doherty, Yunqi Zhang, Daniel Mosse, Jason Mars, Lingjia Tang. Octopus-Man: QoS-Driven Task Management for Heterogeneous Multicore in Warehouse Scale Computers. *Proceedings of the 2015 IEEE 21st International Symposium on High Performance Computer Architecture.* **(HPCA 2015)**

Yunqi Zhang, Michael Laurenzano, Jason Mars, Lingjia Tang. SMiTe: Precise QoS Prediction on Real-System SMT Processors to Improve Utilization in Warehouse Scale Computers. *Proceedings of the 47th Annual IEEE/ACM International Symposium on Microarchitecture.* **(MICRO 2014)**

Michael Laurenzano, Yunqi Zhang, Lingjia Tang, Jason Mars. Protean Code: Achieving Near-Free Online Code Transformations for Warehouse Scale Computers. *Proceedings of the 47th Annual IEEE/ACM International Symposium on Microarchitecture.* **(MICRO 2014)**

INVITED TALKS

SMiTe: Precise QoS Prediction on Real-System SMT Processors to Improve Utilization in Warehouse Scale Computers.
Institute of Computing Technology, Chinese Academy of Science. Dec. 2014

EXPERIENCE

Graduate Student Researcher — Sep. 2013 - Present
University of Michigan, Ann Arbor, MI

Research Intern — Jun. 2015 - Aug. 2015
Microsoft Research, Redmond, WA

Research Collaborator — Oct. 2014 - Mar. 2015
Facebook, Menlo Park, CA

Research Intern — May. 2014 - Aug. 2014
Facebook, Menlo Park, CA

Software Engineer Intern — Jun. 2013 - Oct. 2013
Facebook, Menlo Park, CA

Graduate Student Researcher — Sep. 2012 - Jun. 2013
University of California, San Diego, CA

Software Engineer Intern — Nov. 2011 - Jan. 2012
IBM, Beijing, China

Research Intern — Jul. 2011 - Nov. 2012
Institute of Computing Technology, Chinese Academy of Sciences, Beijing, China

TEACHING

Graduate Student Instructor — Fall 2015
Advanced Compiler (University of Michigan, EECS 583)

HONORS

Facebook Fellowship Finalist, 2015
Chinese Academy of Sciences Scholarship, 2012
National Scholarship, 2011
Microsoft Scholarship, 2010

Meritorious Winner of the Interdisciplinary Contest in Modeling, COMAP, 2010

SKILLS

Programming Languages: Assembly, C, C++, Python, Bash, Java, MATLAB, R
Programming Frameworks: Lex, Yacc, CUDA, MPI, OpenMP, Libevent
Other tools: Gem5, BigHouse, PinTool, Intel Hardware Performance Counters

SERVICE

External Reviewer for ASPLOS 2015, ISPASS 2015, HPCA 2015, CGO 2015, MICRO 2014, IISWC 2014, ISCA 2014

Submission Chair for CGO 2015

RELEVANT GRADUATE COURSES

University of Michigan, Ann Arbor

- EECS 545: Machine Learning
- EECS 583: Advanced Compiler
- EECS 584: Advanced Database Management Systems
- STATS 406: Introduction to Statistical Computing

University of California, San Diego

- CSE 202: Algorithm Design and Analysis
- CSE 222A: Computer Communication Networks
- CSE 240A: Principles of Computer Architecture
- CSE 240B: Parallel Computer Architecture
- CSE 260: Parallel Computation