

# Yunqi Zhang

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## 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. PowerChop: Identifying and Managing Non-Critical Units in Hybrid Processor Architectures. *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, CGO 2017

**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