

Shuang Chen

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EDUCATION

Cornell University, NY, USA.

Aug 2015 ~ Present

Ph.D. Candidate, Computer Systems Laboratory, Department of ECE

– GPA: **3.9**/4.0

– Committee: José F. Martínez (advisor), Christina Delimitrou, Robbert van Renesse

Shanghai Jiao Tong University, China

B.S., Computer Science (SJTU ACM Elite Class), Zhiyuan College

July 2015

– Overall GPA: **90.6**/100 Major GPA: **91.5**/100

PUBLICATIONS

- **Shuang Chen**, Christina Delimitrou, and José F. Martínez, “PARTIES: QoS-Aware Resource Partitioning for Multiple Interactive Services,” in *the 24th ACM International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS)*, Apr 2019.
- **Shuang Chen**, Shay Galon, Christina Delimitrou, Srilatha Manne, and José F. Martínez, “Workload Characterization of Interactive Cloud Services on Big and Small Platforms,” in *the 2017 IEEE International Symposium on Workload Characterization (IISWC)*, Oct 2017.
- Xiaodong Wang, **Shuang Chen**, Jeff Setter and José F. Martínez, “SWAP: Effective Fine-grain Management of Shared Last-level Caches with Minimum Hardware Support,” in *the 23rd IEEE HPCA International Conference on High Performance Computer Architecture (HPCA)*, Feb 2017.
- **Shuang Chen**, Shunning Jiang, Bingsheng He and Xueyan Tang, “A Study of Sorting Algorithms Using Approximate Storage,” in *the 2016 ACM SIGMOD International Conference on Management of Data (SIGMOD)*, June 2016.
- Naifeng Jing, Shunning Jiang, **Shuang Chen**, Jinjie Zhang, Li Jiang, Chao Li and Xiaoyao Liang, “Bank Stealing for a Compact and Efficient Register File Architecture in GPGPU,” in *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 2016.
- Naifeng Jing, **Shuang Chen**, Shunning Jiang, Li Jiang and Xiaoyao Liang, “Bank Stealing for Conflict Mitigation in GPGPU Register File,” in *the 2015 ACM/IEEE International Symposium on Low Power Electronics and Design (ISLPED)*, July 2015.

HONORS AND AWARDS

- Selected for **Rising Stars in EECS Workshop**, UIUC, 2019
 - Winner of the Research Pitch Competition (ECE Track)
- **ECE Woman of the Month**, Cornell University, Mar 2018
- **Cornell Graduate Fellowship**, Cornell University, 2015
- **Outstanding Graduate**, Shanghai Jiao Tong University, 2015 (top 1%)
- **Kai Yuan Scholarship**, Shanghai Jiao Tong University, 2013 (top 20 in Zhiyuan College)
- ACM-ICPC (International Collegiate Programming Contest) Asia Regional
 - **4th place** in Hsinchu Site, 2011 (Team TrustMe)
 - **Gold medal** in Beijing Site, 2011 (Team TrustMe)
- **Silver medal** (ranked the 64th) in National Olympiad in Informatics, China, 2010

TEACHING EXPERIENCE

Teaching Assistant of Advanced Computer Architecture (CS5420/ECE5750) Cornell University, USA	Fall 2019
Guest Lecturer of Competition Programming and Problem Solving Seminar (CS5199) Cornell University, USA	Sept 2019
Head Teaching Assistant of Computer Systems Programming (ECE2400) Cornell University, USA	Spring 2017
Teaching Assistant of Computer Architecture (CS4420/ECE4750) Cornell University, USA	Fall 2016
Teaching Assistant of C++ Programming (CS110) Shanghai Jiao Tong University, China	Fall 2012

TALKS

PARTIES: QoS-Aware Resource Partitioning for Multiple Interactive Services

- Invited talk at *Microsoft Research*, Redmond, Nov 29, 2017
- Conference talk at *the 24th ACM International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS)*, Providence, USA, Apr 15, 2019
- Research pitch competition and poster session at *Rising Stars in EECS Workshop*, University of Illinois at Urbana-Champaign, USA, Oct 30, 2019

Workload Characterization of Interactive Cloud Services on Big and Small Platforms

- Conference talk at *the 2017 IEEE International Symposium on Workload Characterization (IISWC)*, Seattle, USA, Oct 2, 2017

A Study of Sorting Algorithms Using Approximate Storage

- Conference talk at *the 2016 ACM SIGMOD International Conference on Management of Data (SIGMOD)*, San Francisco, USA, June 27, 2016

WORK AND RESEARCH EXPERIENCES

Graduate Research Assistant at Computer Systems Laboratory

Cornell University, NY, USA. August 2015 ~ Present

- *Advisors: José F. Martínez and Christina Delimitrou*
 - Optimization of cache and memory systems
 - QoS-Aware resource partitioning of multiple interactive services
 - Resource management of interactive services using processing-in-memory (PIM)

Research Intern at Facebook Inc.

Menlo Park, CA, USA. Summer 2018

- *Manager: Banit Agrawal*
 - Tupperware monitoring framework
 - GPU tracing, profiling, and analysis

Software Engineering Intern at Cavium Inc.

San José, CA, USA. Summer 2016

- *Manager: Bobbie Manne*
 - Cache and memory system in Cavium ThunderX2
 - Performance analysis of cloud applications

Undergraduate Research Assistant at Xtra Computing Group

Parallel and Distributed Computing Centre
Nanyang Technological University, Singapore August 2014 ~ Feb 2015

- *Advisors: Bingsheng He and Xueyan Tang*
 - Approximate database systems

Undergraduate Research Assistant at Advanced Computer Architecture Laboratory
Shanghai Jiao Tong University, China

July 2013 ~ June 2014

- *Advisor: Xiaoyao Liang*
 - Optimization of GPGPU Register File