

SHU WANG

shuwang@uchicago.edu

EDUCATION

The University of Chicago

Ph.D. Computer Science

Sep 2015 - May 2020(Expected)

Advisor: Shan Lu

University of Wisconsin-Madison

M.S. Computer Engineering (With Thesis)

Sep 2013 - May 2015

Advisor: Xinyu Zhang

Harbin Institute of Technology (Main Campus), China

B.E. Electrical Engineering

Aug 2009 - Jul 2013

PUBLICATIONS

Applying Transactional Memory for Concurrency-Bug Failure Recovery in Production Runs

Yuxi Chen, **Shu Wang**, Shan Lu, Karthikeyan Sankaralingam

IEEE Transactions on Parallel and Distributed Systems (TPDS), 2018

Impact Factor: 3.402

Applying Hardware Transactional Memory for Concurrency-Bug Failure Recovery in Production Runs

Yuxi Chen, **Shu Wang**, Shan Lu, Karthikeyan Sankaralingam

USENIX Annual Technical Conference (ATC), 2018

Acceptance ratio: 20%, 76 out of 378 submissions

Understanding and Auto-Adjusting Performance-Related Configurations

Shu Wang, Chi Li, William Sentosa, Henry Hoffmann, Shan Lu

ACM International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), 2018

Acceptance ratio: 18%, 56 out of 307 submissions

Fundamental Analysis of Full-duplex Gains in Wireless Networks

Shu Wang, Vignesh Venkateswaran, Xinyu Zhang

IEEE/ACM Transactions on Networking (ToN), 2017

Impact Factor: 3.597

Acoustic Eavesdropping through Wireless Vibrometry

Teng Wei, **Shu Wang**, Anfu Zhou, Xinyu Zhang

ACM International Conference on Mobile Computing and Networking (MobiCom), 2015

Acceptance ratio: 18%, 38 out of 207 submissions, one of **top 9** pre-accepted papers

Exploring Full-Duplex Gains in Multi-Cell Wireless Networks: A Spatial Stochastic Framework

Shu Wang, Vignesh Venkateswaran, Xinyu Zhang

IEEE Conference on Computer Communications (INFOCOM), 2015

Acceptance ratio: 19%, 316 out of 1640 submissions

PATENT

Wireless Vibrometer with Antenna Array (Notice of Allowance, 2019)

Xinyu Zhang, Teng Wei, **Shu Wang**, Anfu Zhou

POSTER

Repeatability as Side-Effect in Testbed

Shu Wang, Zhuo Zhen, Jason Anderson, Kate Keahey

ACM/IEEE Supercomputing Conference (Supercomputing), 2018

RESEARCH EXPERIENCES

Automatic Configuration for Software

Research Assistant

Apr 2016 - Aug 2017

Uchicago

- Investigated the correlation between configuration and performance.
- Proposed control-theatrical based solutions for auto-adjusting configurations.

Hardware Transactional Memory Application

Research Assistant

Jan 2016 - Aug 2016

Uchicago

- Explored Intel Hardware Transactional Memory to improve software reliability.

Fine-grained Wireless Sensing Application

Research Assistant

Aug 2014 - Mar 2015

UWmadison

- Implemented an eavesdropping system based on the vibration of wireless signal strength.

Stochastic Analysis of Full-duplex Wireless Network

Research Assistant

Jan 2014 - Jul 2014

UWmadison

- Analyzed full-duplex networks capacity using stochastic geometry under different MAC protocols.

INTERN

Argonne National Laboratory(ANL)

Jun 2018 - Sep 2018

TEACHING ASSISTANT

MPCS-51040 C Programming

Autumn 2015

CMSC-15400 Introduction to Computer Systems

Spring 2019

AWARDS

Student Travel Grant, ASPLOS, Midwest PL Summit

2018

People's Scholarship for Academic Excellence, Three Times

Aug 2009 - Jul 2013

Outstanding Students, Harbin Institute of Technology

2012

Mathematical Contest in Modeling, Honorable Mention

2012

The 3rd China Undergraduate Mathematical Contest, 2nd Prize

2011

Endress+Hauser Enterprise Scholarship

2011

The 2nd China Undergraduate Mathematical Contest, 2nd Prize

2010

SKILLS

- **Programming:** C, Java, Python, Matlab, PHP, Verilog.
- **Software:** Hadoop, HBase, PyTorch.
- **Hardware:** Intel HTM, Embedded System.
- **Platform:** WARP, Intel MCS-51, TI CC2530.
- **IDE:** Emacs, Eclipse, Quartus, IAR, keil, Latex.
- **Related Courses:** OS, Advanced OS, Algorithms, Database, Wireless and Mobile Networks, Computer Architecture, Advanced Computer Networks, Machine Learning, Deep Learning