

Ji Zhu

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Education

PHD in Electrical and Computer Engineering

2010 to now

MS in Electrical and Computer Engineering

Aug 2008 to May 2010

University of Illinois at Urbana-Champaign

Cumulative GPA: 4.00/4.00

BS in Automatic Control Engineering

Aug 2004 to May 2008

Department of Automation, Tsinghua University, China

Cumulative GPA 3.89/4.00

Publications:

Conferences:

- Ji Zhu and Bruce Hajek, “Stability of a Peer-to-Peer Communication System”, PODC 2011.
- Ji Zhu and Mudhakar Srivatsa, “Quantifying Information Leakage in Finite Order Deterministic Programs”, ICC, 2011.
- Bruce Hajek and Ji Zhu, “The missing piece syndrome in peer-to-peer communication,” ISIT 2010.

Journals:

- Bruce Hajek and Ji Zhu, “The missing piece syndrome in peer-to-peer communication”, *Stochastic Systems*, 2010.
- Ji Zhu and Bruce Hajek, “Stability of a Peer-to-Peer Communication System”, IEEE Transactions on Information Theory, accepted, 2012.

Thesis:

- Ji Zhu, “Analysis of P2P File Transferring System by Stochastic Queue Models”, Master Thesis, UIUC, 2010.

Employment Experience

Intern Researcher, Technicolor, Paris, France.

Sep 2011 to Jan 2012

- Manager: Laurent Massoulié Director: Ioannidis Stratis, Nidhi Hegde
- Topic: Multi-swarm P2P systems, meta-stability of rarest-first piece selection.

Intern Researcher, IBM Watson Research Center, New York

Jun 2010 to Aug 2010

- Manager: Dakshi Agrawal Director: Mudhakar Srivatsa
- Topic: Information Leakage in Programs.

Research Assistant, CSL Lab, University of Illinois, Urbana, IL.

Aug 2008 to present

- Advisor: Professor Bruce Hajek
- Research: P2P networks, network coding, content placement networks, etc.

Lab Assistant, Systems Engineering Lab, Tsinghua University

Jan 2008 to May 2008

- C Programmer for Tsinghua Vehicle Identification System
- Analyzed different image processing algorithms
- Worked with a variety of people, including administrators, engineers, managers, and students

Lab Assistant, Bioinformatics Lab, Tsinghua University

Apr 2007 to Aug 2007

- Designer and C Programmer for a Gene Chip Processing Software
- Improved and analyzed large databases

- Tested the performance of different Pattern Recognition Algorithms

Lab Assistant, Video and Image Processing Lab, Tsinghua University Sep 2006 to Sep 2007

- Developed Human – Computer Interaction part for a Virtual Video Navigation System.
- Integrated video decoding software into the system.

Skills

- Probability theory, random process, information theory, coding theory, optimization, simulation.
- Four years' experience at C++/C and Matlab; Experienced at php & Mysql.
- Data structure, algorithm designing.

Courses:

Aug 2008 to now

- Random Processes
- Advanced Digital Communication
- Control System Theory & Design
- Detection & Estimation Theory
- Real Analysis I
- Communication Network Analysis
- Information Theory
- Information Theory for Operations Research
- Intro to Abstract Algebra
- Optimum Control Systems
- Cloud Computing
- Real Analysis II
- Theory of Probability I
- Computer Network Analysis