

Qiao Zhang

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qiao@cs.washington.edu

EDUCATION

UNIVERSITY OF WASHINGTON

PH.D IN COMPUTER SCIENCE

Expected June 2018 | Seattle, WA

GPA: 3.9 / 4.0

Advisor: Tom Anderson, Arvind Krishnamurthy

WILLIAMS COLLEGE

BA IN COMPUTER SCIENCE AND PHYSICS

June 2013 | Williamstown, MA

summa cum laude and Phi Beta Kappa

GPA: 3.99 / 4.0

CALTECH

VISITING STUDENT

Oct 2011 - June 2012 | Pasadena, CA

GPA: 4.0 / 4.0

RESEARCH INTERESTS

Distributed Systems, Datacenter Networks, Deep Learning Systems

COURSEWORK

MACHINE LEARNING

CSE 546: Machine Learning

CSE 517: Natural Language Processing

CSE 515: Statistical Methods in Computer Science

SYSTEMS

CSE 550: Computer Systems

CSE 551: Operating Systems

CSE 552: Distributed Systems

CSE 548: Computer Architecture

CSE 544: Data Management

CSE 504: Advanced Topics in Software Engineering

TEACHING ASSISTANT

Deep Learning System (UW CSE 599G1)

Operating Systems (UW CSE 451)

Computer Networks (UW CSE 461)

PROGRAMMING

Fluent:

C++ • C • Python • Java

Familiar:

C# • MySQL

EXPERIENCE

MICROSOFT RESEARCH | RESEARCH INTERN, SYSTEMS

June 2017 – Sep 2017 | Redmond, WA

- Designed and built a streaming system that can diagnose and localize failures responsible for IaaS VMs crashes using the machine learning techniques of Lasso Regression and Hypothesis Testing. Submitted a research paper to top networking conference NSDI 2018.

FACEBOOK | SOFTWARE ENGINEERING INTERN, NET SYSTEMS

July 2016 - Oct 2016 | Palo Alto, CA

- Worked on a scalable TCP incast detection system that instruments end-host TCP stack using bcc and collects TCP statistics using an internal streaming system. Submitted a research paper to top networking workshop IMC 2017.

GOOGLE | SOFTWARE ENGINEERING INTERN, PLATFORMS NETWORKING

Sept - Dec 2015 | Mountain View, CA

- Worked on network topology synthesis using Integer Program Solver.
- Worked on data center network measurements.

GOOGLE | SOFTWARE ENGINEERING INTERN, MAPREDUCE

June - August 2014 | Mountain View, CA

- Worked on fine-grained locking to improve transaction throughput for the 2nd generation MapReduce backend.

PUBLICATIONS

- Qiao Zhang, Vincent Liu, Hongyi Zeng, Arvind Krishnamurthy. "High-Resolution Measurement of Data Center Microbursts". (IMC 2017).
- Danyang Zhuo, Qiao Zhang, Xin Yang, Vincent Liu. "Canaries in the Network". (HotNets 2016).
- Danyang Zhuo, Qiao Zhang, Tom Anderson, Arvind Krishnamurthy, Vincent Liu. "Rack-level Congestion Control". (HotNets 2016).
- Danyang Zhuo, Qiao Zhang, Dan Ports, Arvind Krishnamurthy, Tom Anderson. "Machine Fault Tolerance for Reliable Datacenter Systems". (APSYS 2014).
- Simon Peter, Umar Javed, Qiao Zhang, Doug Woos, Tom Anderson, Arvind Krishnamurthy. "One Tunnel is Enough". (SIGCOMM 2014).
- Qiao Zhang, Shyam Gollakota, Ben Taskar, Rajesh Rao. "A Non-invasive Tongue Machine Interface". (CHI 2014).

AWARDS

2008 National Mathematics Olympiad (Singapore) Silver Medal

2007 National Physics Olympiad (Singapore) Bronze Medal

GITHUB

Homepage <http://github.com/zhangqiaorjc>

Paxos Implementation <http://github.com/zhangqiaorjc/cse550>

AutoDiff for Deep Learning <http://github.com/dlsys-course/assignment1>

GPU Executor for Deep Learning <http://github.com/dlsys-course/assignment2>