Shuang Liu

Contact Information

Department of Computer Science and Engineering
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Education

University of California, San Diego, Sept. 2016 - Present

- Ph.D student in Computer Science
- Research Advisor: Hao Su

Shanghai Jiao Tong University, Sept. 2012 - 2016

- B.S. in Computer Science
- Research Advisors: Karthik Sridharan, Zhihua Zhang, Xiaomin Chen

Research Interest

My research focus is on theoretical and applied machine learning. My past research areas include: Bandit Optimization, Regularity Lemma, Online Convex Optimization, Generative Adversarial Learning, and Large-Scale Optimal Transport.

Programming Skills

C, C++, Java, Python (Pytorch)

Research Experience

Research Assistant, Sept. 2016 - Sept. 2018

- Institute: University of California, San Diego
- Mentor: Kamalika Chaudhuri
- Topics: Machine Learning Theory, Generative Adversarial Learning, Large-Scale Optimal Transport

Research Intern, Feb. 2016 - May 2016

- Institute: Yitu Technology
- Topics: Face detection and Face alignment

Research Assistant, July 2015 - Dec. 2015

- Institute: Cornell University
- Mentor: Karthik Sridharan
- Topics: Convex Analysis, Banach Space Geometry, Large-Scale Smooth Optimization, Online Learning, Bandit Convex Optimization, Partial Information Games

Independent Research, Jan. 2015 - June 2015

- Institute: Shanghai Jiao Tong University
- Mentor: Xiaomin Chen
- Topics: Szemerédi Regularity Lemma, Multi-Coloured Ramsey Numbers of Odd Cycles, Lines in Hypergraphs and Metric Spaces

Research Assistant, June 2014 - June 2015

- Institute: Shanghai Jiao Tong University
- Mentor: Zhihua Zhang
- Topics: Convex Optimization, Statistical Machine Learning, Stochastic Bandit Optimization, Distributed Bandit Optimization

Publications

Postprints

- Shuang Liu, Olivier Bousquet, Kamalika Chaudhuri
  Approximation and Convergence Properties of Generative Adversarial Learning
  NIPS 2017, Spotlight

Preprints

- Shuang Liu, Kamalika Chaudhuri
  The Inductive Bias of Restricted f-GANs
- Shuang Liu, Cheng Chen, Zhihua Zhang
  Regret vs. Communication: Distributed Stochastic Multi-Armed Bandits and Beyond

Teaching Experience	**Teaching Assistant**, Spring 2015
	• Course: Advanced Compiler Design
	• Institute: Shanghai Jiao Tong University
	• Instructor: Yong Yu
	Teaching Assistant, Spring 2018
	• Course: Introduction to AI: A Statistical Approach
	• Institute: University of California, San Diego
	• Instructor: Kamalika Chaudhuri

Undergraduate Projects	**C Compiler implemented in Java**
	• https://bitbucket.org/sadkangaroo/compiler2014
	Nachos Operating System implemented in Java
	• https://bitbucket.org/sadkangaroo/nachos2014
	Unix-like Shell implemented in C
	• https://github.com/sadkangaroo/shellproject
	Simulated GPGPU implemented in C++
	• https://bitbucket.org/sadkangaroo/my-gpgpu-sim
	Database Back-End implemented in C
	• https://bitbucket.org/sadkangaroo/shuangliudbspring15
	Database Front-End implemented in MySQL and Java
	• https://bitbucket.org/vegetable_h/database-project

Graduate Projects	**Compiler Optimization through LLVM**
	• https://ucsd-pl.github.io/cse231/wi17/project.html

Awards	**2018 Google PhD Fellowship**
	(39 recipients from North America, Europe and the Middle East)
	SoCal Machine Learning Symposium 2017 - Amazon Best Poster Honorable Mention
	2015 Google Excellence Scholarship
	(58 Recipients in China)
	ACM International Collegiate Programming Contest, Asia Regional
	• Gold Medal in Shanghai, China, 2011
	• Gold Medal in Fuzhou, China, 2011
	• Gold Medal in Tianjin, China, 2012
	• 4th Place in Hat Yai, Thailand, 2012
	• Gold Medal in Changsha, China, 2013
	• Silver Medal in Changchun, China, 2013
	National Olympiad in Informatics, China
	• Bronze Medal (National), 2011
	• Gold Medal (Province), 2007, 2008, 2009, 2010