

Shuang Liu

Contact Information

Department of Computer Science and Engineering
University of California, San Diego
9500 Gilman Drive, EBU3B 4142
La Jolla, CA 92093

E-mail: s3liu@eng.ucsd.edu

Mobile: (+1) 858-230-5110

Education

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

- Ph.D student in Computer Science
- Research Advisor: Kamalika Chaudhuri

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 (Tensorflow, Pytorch)

Research Experience

Research Assistant, Sept. 2016 - Present

- 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

Teaching Experience

Teaching Assistant, Spring 2015

- Course: Advanced Compiler Design
- Institute: Shanghai Jiao Tong University

Publications	Postprints <ul style="list-style-type: none"> • Shuang Liu, Olivier Bousquet, Kamalika Chaudhuri Approximation and Convergence Properties of Generative Adversarial Learning (NIPS 2017)
	Preprints <ul style="list-style-type: none"> • Shuang Liu, Kamalika Chaudhuri Principled Regularization for Large-Scale Optimal Transport • Shuang Liu, Cheng Chen, Zhihua Zhang Regret vs. Communication: Distributed Stochastic Multi-Armed Bandits and Beyond • Cheng Chen, Shuang Liu, Zhihua Zhang, Wu-Jun Li A Parallel Algorithm for \mathcal{X}-Armed Bandits
Undergraduate Projects	C Compiler implemented in Java <ul style="list-style-type: none"> • https://bitbucket.org/sadkangaroo/compiler2014
	Nachos Operating System implemented in Java <ul style="list-style-type: none"> • https://bitbucket.org/sadkangaroo/nachos2014
	Unix-like Shell implemented in C <ul style="list-style-type: none"> • https://github.com/sadkangaroo/shellproject
	Simulated GPGPU implemented in C++ <ul style="list-style-type: none"> • https://bitbucket.org/sadkangaroo/my-gpgpu-sim
	Database Back-End implemented in C <ul style="list-style-type: none"> • https://bitbucket.org/sadkangaroo/shuangliudbspring15
	Database Front-End implemented in MySQL and Java <ul style="list-style-type: none"> • https://bitbucket.org/vegetable_h/database-project
Graduate Projects	Compiler Optimization through LLVM <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Bronze Medal (National), 2011 • Gold Medal (Province), 2007, 2008, 2009, 2010