Kevin Shi

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Education

Ph.D. in Computer Science — Columbia University, Fall 2014 - present

Coadvised by Daniel Hsu and Allison Bishop

M.A. in Mathematics (joint degree) — University of Pennsylvania, Fall 2012 - Spring 2014

Advised by Sanjeev Khanna. Thesis: Fast Circuit Satisfiability

B.S. in Computer Science and Mathematics — University of Pennsylvania, Fall 2010 - Spring 2014

Experience

Data science intern — Button
New York City — May 2017 - August 2017
Researching and implementing models for adaptive anomaly detection and for derived customer segmentation.

Visiting graduate student — Simons Institute for the Theory of Computing
Berkeley, CA — January 2017 - April 2017
Program on Foundations of Machine Learning

Computer vision intern — Lily Robotics
Boston, MA — June 2014 - Aug 2014
Researched and implemented a vision-based people tracking system in C++ and OpenCV for use on a quadrotor platform. Used techniques from multiscale object detection, online machine learning, and sensor fusion

Research intern — MIT Lincoln Laboratory
Lexington, MA — May 2013 - August 2013
Designed feature extraction algorithms for time series obtained from radar. Classification accuracy using this improved upon current statistical methods. Gave group presentation and wrote internal paper

Undergraduate researcher — Penn Applied Algebraic Topology
University of Pennsylvania — May 2012 - August 2012
Studied a group-theoretic generalization of network flows

Papers

Correspondence retrieval
Alexandr Andoni, Daniel Hsu, Kevin Shi, Xiaorui Sun
To appear in Conference on Learning Theory (COLT) 2017

Linear regression without correspondence
Daniel Hsu, Kevin Shi, Xiaorui Sun
Submitted to Neural Information Processing Systems (NIPS) 2017

Optimal neural tuning for arbitrary stimulus priors
Jimmy Wang, Kevin Shi, Alan Stocker, Daniel Lee
In Computational and Systems Neuroscience (COSYNE) 2012

Teaching

Teaching Assistant - Columbia University

- COMS 4444 - Programming and Problem Solving - Fall 2016
- COMS 4772 - Advanced Machine Learning - Spring 2016
- COMS 6998 - Algorithms for Massive Data -Fall 2015

Teaching Assistant - University of Pennsylvania

- CIS 320 - Algorithms - Spring 2013
- CIS 262 - Theory of Computation - Fall 2012

Awards

SAP Code Slam Finals - 1st Place - October 2012
Worldwide online programming competition with a $5k scholarship

Putnam Top 500 - December 2012

PennApps Top 20 - Fall 2013 and Fall 2014

TripAdvisor Programming Challenge - 2nd place at Columbia University - Fall 2016

Service

External reviewer for STOC 2016, JMLR 2016

PhD coffee hour organizer for Columbia Computer Science Department, 2016

Chair of Penn Undergraduate Math Society, Fall 2012 - Spring 2014

Skills

Python, Matlab, Java, C++, OpenCV