Kevin Shi

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Education

Ph.D. Computer Science *Columbia University*
Coadvised by Daniel Hsu and Allison Bishop Fall 2014 - present
Research interests: machine learning theory, geometry of optimization, cryptography

M.A. Mathematics *University of Pennsylvania*
Fall 2012 - Spring 2014
Coursework: algebraic topology, algebraic number theory, complex analysis, functional analysis, differential topology, enumerative combinatorics

B.S. Computer Science and Mathematics *University of Pennsylvania*
Magna Cum Laude. Honors in Mathematics Fall 2010 - Spring 2014

Experience

Data science intern *Button*
New York City May 2017 - August 2017
Researched and implemented models for adaptive anomaly detection in Python. Deployed models to process all production data in real time.

Content consultant *Correlation One*
New York City Sept 2017 - present
Designing and writing questions for evaluating data scientists

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. Gave group presentation and wrote internal paper

Publications

Linear regression without correspondence
Daniel Hsu, Kevin Shi, Xiaorui Sun
To appear in Neural Information Processing Systems (NIPS) 2017

Correspondence retrieval
Alexandr Andoni, Daniel Hsu, Kevin Shi, Xiaorui Sun
In Conference on Learning Theory (COLT) 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 at 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

Awards

SAP Code Slam - 1st Place - October 2012

Putnam Top 500 - December 2012

PennApps Top 20 - Fall 2013, Fall 2014

Skills

Python, Matlab, Java, C++, OpenCV