

Education

- 2014–now **Ph. D. in Computer Science**, *Columbia University*.
Coadvised by Daniel Hsu and Allison Bishop
Research interests: algorithms, statistical learning theory, nonconvex optimization
- 2017 **M. Phil in Computer Science**, *Columbia University*.
Subject: stochastic optimization
- 2012–2014 **M. A. in Mathematics**, *University of Pennsylvania*.
- 2010–2014 **B. S. in Computer Science and Mathematics**, *University of Pennsylvania*.
Magna Cum Laude. Honors in Mathematics

Experience

Industry

- 05/2017– **Data Science Intern**, *Button*, New York, NY.
08/2017 Researched and implemented models for adaptive anomaly detection in Python. Enabled automatic learning and tracking of new partner launches. Deployed models to process all production data in real time
- 05/2014– **Computer Vision Intern**, *Lily Robotics*, Boston, MA.
08/2014 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
- 05/2013– **Research Intern**, *MIT Lincoln Laboratory*, Lexington, MA.
08/2013 Designed feature extraction algorithms for time series obtained from radar. Wrote internal paper

Research

- 01/2017– **Visiting Scholar**, *Simons Institute for the Theory of Computing*, Berkeley, CA.
04/2017 Attended program on Foundations of Machine Learning
- 05/2012– **Summer Intern**, *Penn Applied Algebraic Topology*, University of Pennsylvania.
08/2012 Studied a sheaf-theoretic generalization of network flow duality

Other

- 2017–now **Content Consultant**, *Correlation One*, New York, NY.
- 09/2016– **Teaching Assistant**, *COMS W4444 Programming and Problem Solving*, Columbia University.
12/2016 Designed and implemented simulators for multiplayer games with student code using Java and Google Cloud

Publications

- Daniel Hsu, Kevin Shi, and Xiaorui Sun. Linear regression without correspondence. In *Advances in Neural Information Processing Systems 30*, 2017.
- Alexandr Andoni, Daniel Hsu, Kevin Shi, and Xiaorui Sun. Correspondence retrieval. In *Proceedings of the 2017 Conference on Learning Theory*, 2017.
- Jimmy Wang, Kevin Shi, Alan Stocker, and Daniel Lee. Optimal neural tuning for arbitrary stimulus priors. In *Computational and Systems Neuroscience*, 2012.

Awards

- 09/2014 **PennApps Hackathon**, *Top 20*, University of Pennsylvania.
Built an application which use multiple webcams to track finger location and a projector to draw
- 09/2013 **PennApps Hackathon**, *Top 20*, University of Pennsylvania.
Created an automatic page-turner which listens to the musician and matches sheet music location
- 12/2012 **Putnam Math Competition**, *Top 500*.
- 10/2012 **SAP Code Slam Grand Finals**, *1st Place*.

Technical Skills

Proficient in Python (incl. NumPy, SciPy, Pandas), Matlab, Java
Familiar with C++, OpenCV, SQL