Kai Yuanqing Xiao

450 Beacon Street • Boston, MA 02115 • 408.828.9796 • kaix@mit.edu

EDUCATION

Massachusetts Institute of Technology   Cambridge, MA
Candidate for B.S. Degree in Computer Science and Mathematics; GPA: 5.0/5.0   2013-2017
Coursework: Advanced Algorithms, Computer and Network Security, Probability Theory, Algorithms for Inference

Oxford University   Oxford, UK
Visiting Student in Mathematics at St. Peter's College   Jan.-June 2016
Coursework: Machine Learning, Networks

Bellarmine College Preparatory   San Jose, CA
GPA: 4.0/4.0; SAT: 2400   2009-2013

WORK EXPERIENCE

Citadel   Chicago, IL
Summer Quantitative Research Analyst   Summer 2016
- Used text mining and sentiment analysis on a unique dataset to construct alpha signal
- Improved the data processing pipeline and evaluated changes using characteristic portfolios and simulations

D.E. Shaw & Co.   New York City, NY
Quantitative Analyst / Software Development Intern   Summer 2015
- Created mathematical models for the behavior of specific types of trades based on market conditions
- Used vectorized operations in NumPy to analyze large amounts of historical data

A9 (Product Search Team)   Palo Alto, CA
Software Development Engineer Intern   Summer 2014
- Worked with Apache Hadoop and Apache Pig to perform map-reduce tasks
- Generated and logged statistical metrics related to Amazon's product search rankings
- Mined Twitter data for trending music and showed related items available on Amazon (side project)

Jane Street Capital   New York City, NY
Assistant Trader   January 2014
- Modeled stock market behavior through analysis of historical and recent financial data

Stanford University Chemistry Department; Bianxiao Cui, Ph.D.   Stanford, CA
Data Analysis Intern   July-Aug. 2012
- Processed images of protein movement across axons; traced curves in images using **MATLAB** program
- Improved functionality of **MATLAB** curve-tracing program after learning the language from scratch

LEADERSHIP EXPERIENCE
MIT TechX
Director of Corporate Relations   2014-2015
- Leader of student group that communicated with companies to sponsor and exhibit their technologies at MIT's annual xFair
- Worked with other executive board members to run events that expose MIT students to cool technology

PROJECTS & RESEARCH

Cookie Clicker; Erik Demaine, Ph.D.   Present
- Analyzing optimal strategies for incremental games like Cookie Clicker
- Working on NP-Completeness result and approximation algorithms

Secure Messaging App   May 2015
- Created an iOS app for secure messaging that uses one-time-pad encryption and randomly generated bits

Paper on Online Algorithms   December 2014
- Wrote an original paper discussing online algorithms applied to HitGrab's game Mousehunt

Multi-player Pinball Game   May 2014
- Used Java to create a multi-player pinball game with multiple clients and a server

AWARDS

Math and Science Olympiads   2009-2013
- Qualified 4 times for USA Math Olympiad; Ranked top 24 in the nation out of over 100,000 in 2012
- Attended Math Olympiad Summer Program 2 times; top 50 students on the USA Math Olympiad are invited

SKILLS & INTERESTS
- Computer Programming: Python, Java, R
- Interests: Dance, Ultimate Frisbee, Pi Lambda Phi Fraternity, Basketball, Alpine Skiing, Speech and Debate