Kai Yuanqing Xiao

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

ED	TIL	$\boldsymbol{\cap}$	۸П	CT4	U.	NΤ
$\Gamma_{I}IJ$. , /	٦.		.,	· •

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, Probability Theory, Algorithms for Inference, Computer Vision, TA for Algorithms II

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.

Quantitative Analyst / Software Development Intern

New York City, NY 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

Assistant Trader

New York City, NY

January 2014

Modeled stock market behavior through analysis of historical and recent financial data

Stanford University Chemistry Department; Bianxiao Cui, Ph.D.

Stanford, CA July-Aug. 2012

Data Analysis Intern

- · 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, C, R
- Interests: Dance, Ultimate Frisbee, Pi Lambda Phi Fraternity, Basketball, Alpine Skiing, Speech and Debate