MAYANK AGRAWAL

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EDUCATION

University of Oxford

October 2016 - June 2017

Visiting Student, St. Anne's College

Swarthmore College

August 2014 - May 2018

Pursuing B.A. in Computer Science, Minors in Mathematics and Philosophy

GPA: 3.78 / 4.00

PROFESSIONAL EXPERIENCE

Mercury Fund

August 2016 - September 2016

 $An alyst\ Intern$

Houston, TX

- \cdot Early stage venture capital fund with over \$250 million focusing on companies in the U.S. Midcontinent
- · Researched, analyzed, and evaluated startups integrating life sciences with artificial intelligence
- · Presented to fund's partners and advisors about fundamentals and landscape of machine learning

Robotics Institute, Carnegie Mellon University

May 2016 - August 2016

Pittsburgh, PA

- · Full-time developer for RoboTutor, a project to create educational AI for students ages 7 10
- · Developed arithmetic tutors and designed motivational agent to instill growth mindset in learner
- · Entered in competition for attempt to win \$10 million and will be released as open-source afterwards

RESEARCH

Developer

Aguirre Lab, University of Pennsylvania

June 2015 - August 2015

Philadelphia, PA

Research Assistant

- · Worked under Professors Geoffrey K. Aguirre and David Brainard to study melanopsin
- · Measured pupil distortion in response to flickering light to characterize nonlinear filters in eye
- · Constructed distributed computing setup to automatically communicate and run experiments

TECHNICAL PROJECTS

Spykes

- · Open-source Python library created and maintained by Northwestern University's Kording Lab
- · Developing new visualization and analytic methods to assist neuroscience researchers

GreenMon

- · Created peer-to-peer system that dynamically turns on and off nodes in response to cluster usage
- · Developed lightweight, scalable algorithm to bypass communication and avoid usage of master node
- · Estimated power usage reduction of roughly 80% in schoolwide computing cluster

TEACHING

Swarthmore College

August 2015 - May 2016

Student Academic Mentor

Swarthmore, PA

- · Guided first-year students in making transition from high school to college
- · Held biweekly study breaks to teach fundamental study skills such as note taking and scheduling
- · Organized and moderated panel for students at the end of freshman year

Swarthmore College

Computer Science Ninja

January 2015 - May 2015 Swarthmore, PA

- · Teaching Assistant for CS 21: Introduction to Computer Science with Professor Jason Waterman
- · Helped students during class as well as held weekly lab help sessions in the evenings
- · Developed ability to quickly find bugs and explain abstract concepts to beginner students

Breakthrough Houston

June 2013 - August 2013 & June 2014 - August 2014

Teaching Fellow

Houston, TX

- · Taught 7th and 8th grade algebra to highly-motivated, inner city middle school students
- · Wrote own lesson plans and implemented multiple research-driven pedagogical techniques
- · Piloted Breakthrough Pals Initiative to develop leadership skills among 9th grade students

TECHNICAL SKILLS

Computer Languages Python, C++/C, Java, MATLAB, R

Tools LATEX, Unix, git, OpenCV, MPI, Android Studio, NumPy, CUDA

EXTRACURRICULARS

NCAA DIII Varsity Cross Country, Track & Field

HONORS & AWARDS

2016 John W. Nason Community Service Fellowship

2014 Philip Evans Scholar