Akshay Ravikumar

http://akshayr.me

akshayr@mit.edu · (925) 413 6077

229 Vassar Street, Cambridge, MA 02139

■ Education

Massachusetts Institute of Technology (MIT) Candidate for a Bachelor's of Science in EECS

Completed Coursework: Intro to EECS, Relativity, Multivariable Calculus

Current Coursework: Elements of Software Construction, Introduction to Machine Learning,

Algorithms, Probability and Random Variables, Differential Equations, Microeconomics

Foothill High School

Researcher

Pleasanton, CA

Cambridge, MA

Graduation: June 2018

2nd Rank in a Class of ~600, GPA: 4.45 (weighted)

August 2010 - June 2014

■ Research Experience |

MIT Space Systems Lab (SSL)

Cambridge, MA

October 2014 – December 2014

• Upgrading the C++ framework for SPHERES satellites and testing/implementing Open CV computer vision algorithms that enable the satellites to dock to each other

MIT Computer Science and Artificial Intelligence Laboratory Researcher

Cambridge, MA

October 2014 - December 2014

• Implemented programs on Arduino and PIC32 microcontrollers to help create a system to bring cheap, efficient power to Indian villages

Stanford Institute of Medicine Research (SIMR) Program Bioinformatics Research Intern

Palo Alto, CA

June 2013 - August 2013

- · Directed a three-person project to computationally analyze prostate cancer biomarkers
- Used C++/Java/R to identify trends in protein stability, amino acid composition, etc.

Work/Leadership Experience I

EmbedUR Systems Software Engineering Intern

Fremont, CA

January 2015

 Conducted the migration of a C-based Radio Resource Management (RRM) Algorithm from MySQL to Cassandra, a distributed database management system

Art of Problem Solving Class Grader/Assistant

Cambridge, MA

September 2014 – Present

· Assisting in online math/computer science classes, and providing feedback on students' homework

Pleasanton Math Circle (http://www.pleasantonmathcircle.com)
Co-founder and Lecturer

Pleasanton, CA

November 2011 - June 2014

• Founded a math circle to educate 60 middle school students on abstract mathematical concepts

Awards/Honors I

- First Place in the Media/Advertising Category at the 2014 Harvard Hackfest
- 4th place in the MIT IAP Web Programming Competition
- Silver division of the USA Computing Olympiad, an algorithmic programming competition in C++
- Two-time USA Math Olympiad Qualifier, Two-time USA Junior Math Olympiad Qualifier

■ Skills I

- Considerable experience with C++, Python
- Experience with Javascript, C, jQuery, Java, SQL,
 Cassandra, MongoDB, PIC Microcontrollers
- Strong mathematical background
- Currently pursuing independent web development (see my <u>Github</u>)