# **AKHILA ANANTHRAM**

#### **EDUCATION**

Cornell University Ithaca, NY

2012 – Present

BA in Computer Science and Mathematics, GPA 3.53

Concentration: Artificial Intelligence

Thomas Jefferson High School for Science and Technology Alexandria, VA

2008 - 2012

## **PROFESSIONAL EXPERIENCE**

Blackbird Technologies, Menlo Park, CA Artificial Intelligence Intern

May – August 2014

Detected the dominant color in an image using decision trees and color SVMs • implemented a spatial pyramid to improve image classification, soft k-means to handle ambiguity in image classes, and an autocropper to crop rotated images • made a Parts of Speech tagger (*Python*)

Ancient Wisdom Productions, Ithaca, NY iOS Programming Intern April – December 2013 Added features to a pre-existing application Piction • created an iOS application from scratch (Objective C)

**AnthroTronix, Inc., Silver Spring, MD** Software Engineering Intern May – August 2013 Modified an Android application • object detection – *NDA* • implemented a game called Tap Tap Rehabilitation to use with a stroke glove • created a version of Tetris for the Makey Makey • wired an Arduino and programmed a GUI controller (*Java, Matlab, Processing*)

### **TEACHING EXPERIENCE**

Cornell Data Science Education Lead

December 2014 – Present

Organized a 5 hour crash course for 60 students • lead weekly educational sessions on cutting edge skills

**CS 4760, Introduction to Computer Vision** Teaching Assistant

January 2015 – Present

Hold weekly office hours • grade the exams and homework assignments • monitor Piazza (an online forum) and answer questions • ported projects from C++ to Python (*Professor Kavita Bala*)

MATH 1110, Calculus I Course Assistant

August – December 2013

Graded homework • held weekly study sessions to help students with their classwork (Professor Daina Taimina)

#### **PROJECTS**

**Outside:** Keystroke Dynamics on Smartphones (*Python*) • Application of Genetic Algorithms to Procedural Image Generation (*Python*, C++) • EEG Classification for Seizure Prediction (*Python*)

**In-Class:** Sentiment Analysis of Rotten Tomatoes Reviews for Analyzing Box Office Revenues (*Python*) • Analysis of Phonations for Speaker Identification (*Matlab*)

## **RELEVANT COURSE WORK**

Algorithms • Artificial Intelligence • Machine Learning • Operating Systems • Information Retrieval • Functional Programming • Computational Linguistics • Mathematical Foundations for the Information Age • Applicable Algebra • Linear Algebra • Statistics

Fall '15: Software Engineering • Optimization • Differential Equations • Probability

# **SKILLS AND INTERESTS**

Proficient Programming Languages: Python • Java • C++ • Matlab • Bash Scripting • LaTeX

Other Technical: OpenCV • sklearn • NLTK • git • pandas • numpy • Vim • Eclipse • JIRA

Organizations: Cornell Data Science • Math Explorer's Club • Alpha Xi Delta