

## 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 auto-cropper to crop rotated images • incorporated PCA into the pipeline • made a parts of speech tagger (*Python, bash scripts, JSON, OpenCV, NumPy, NLTK, sklearn, sklearn*)

**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 • detected objects in images using computer vision – *ND4* • implemented a game called Tap Tap Rehabilitation to use with a stroke glove • created a version of Tetris to use with a Makey Makey • wired an Arduino and programmed a GUI to change the color of an LED board connected to the microcontroller (*Java, Matlab, Python, OpenCV, Processing*)

## TEACHING EXPERIENCE

**CS 4760, Introduction to Computer Vision** Teaching Assistant January 2015 – Present  
Hold weekly office hours • grade the exam and homework assignments • monitor Piazza (an online forum) and answer questions • assist with project development for a course that uses C++ (*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:** Application of Genetic Algorithms to Procedural Image Generation (*Python, C++, OpenCV, NumPy*) • EEG Classification for Seizure Prediction (*Python, sklearn, NumPy*)

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

## RELEVANT COURSE WORK

Artificial Intelligence • Practicum in Artificial Intelligence • Machine Learning • Operating Systems • Information Retrieval • Computer System Organization and Programming • Functional Programming • Discrete Structures • Object Oriented Programming and Data Structures • Mathematical Foundations for the Information Age • Applicable Algebra • Linear Algebra • Computational Linguistics

**Current Courses:** Algorithms • Statistics • Natural Language Processing • Machine Learning for Data Science • Seminar in Artificial Intelligence

## SKILLS AND INTERESTS

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

**Other Technical:** OpenCV • sklearn • NLTK • Git • NumPy • Vim • Eclipse • JIRA

**Organizations:** Data Science Club (*Vice President of Education*) • Alpha Xi Delta