

Education

Cornell University - College of Arts and Sciences, Ithaca, NY

Bachelors of Computer Science and Mathematics, GPA 3.553/4

2012 – Present: Junior

TJHSST - Thomas Jefferson High School for Science and Technology, Alexandria, VA

2008 – 2012. GPA 4.242/4

Professional Experience

Blackbird Technologies, Menlo Park, CA Artificial Intelligence Intern *May 2014 – August 2014*

Worked on detecting the dominant color in an image using a decision tree and an SVM; classified images and query logs; implemented a spatial pyramid to improve image classification; implemented soft k-means to handle ambiguity in image classes; created an auto-cropper to crop rotated images; worked on polka dot and pattern detection in images; read many research papers on computer vision; tested the classifiers; worked with SVMs; used bash scripts and Python with OpenCV; incorporated PCA into the system; worked with NLTK to make a parts of speech tagger; modified the hashing to account for the bias caused by hashing collisions

Calculus I Course Assistant *August 2013 – December 2013*

Graded homework; held study sessions and helped students in the class with their work

Ancient Wisdom Productions, Ithaca, NY iOS Programming Intern *April 2013 – December 2013*

Added new features to a pre-existing application Piction; created an iOS application from scratch

AnthroTronix, Inc., Silver Spring, MD Software Engineering Intern *May 2013 – August 2013*

Software testing; learned the basics of Android app development and made a basic application; work with Matlab for data analysis using graphs and number manipulation; Computer Vision using Python and OpenCV to detect objects in images (NDA); made a game called Tap Tap Rehabilitation to use with a stroke glove in Java; used Processing to create a version of Tetris to use with a Makey Makey, a device that can make any conductive material into an input; wired an Arduino and programmed a GUI to change the color of an LED board connected to the microcontroller in Java

Relevant Course Work

Introduction to Computer Vision

Group Projects – Image Scissors to semi automatically cut out something from an image; Feature detector to compare images; Panorama maker; System to create 3D models from single images; Machine Learning to build a pedestrian detector

Computer Science courses: AP Computer Science (*Java*); Introduction to Computer Programming with Python (*Python*); Object Oriented Programming and Data Structures (*Java*); Introduction to iPhone Application Development (*Objective C*); Discrete Structures; Introduction to Computer Vision (*C++*); Data Structures and Functional Programming (*Ocaml*); C++ Programming (*C++*); Computer System Organization and Programming (*C*); Unix Tools and Scripting (*Bash scripts*); Topics in Computational Linguistics (*Matlab & Python*)

Math courses: BC Calculus; Multi Variable Calculus; Linear Algebra; Applicable Geometry; Computational Algebra; Honors Introduction to Analysis I; Applicable Algebra; Mathematical Foundations for the Information Age

Other Relevant Courses at Cornell University: Introduction to Linguistics

Current Courses: Foundations of Artificial Intelligence; Practicum in Artificial Intelligence; Machine Learning; Operating Systems; Information Retrieval; Introductory Design and Programming for the Web

Skills

Java, Python, C++, Matlab, Bash Scripting, Ocaml, Objective C, C, Scala, and Haskell

Vim, Github, Codebase, JIRA