Akhila Ananthram
asa225@cornell.edu

Education

Cornell University - College of Arts and Sciences, Ithaca, NY
Bachelors of Computer Science and Mathematics, GPA 3.553/4
Concentration: Artificial Intelligence
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 decision trees and color SVMs; implemented a spatial pyramid to improve image classification and soft k-means to handle ambiguity in image classes; created an auto-cropper to crop rotated images; worked on polka dot and pattern detection; incorporated PCA into the pipeline; Made a parts of speech tagger (*Python, bash scripts, OpenCV, NLTK, sklearn, sktrain, word2vec*)

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 (*Objective C*)

AnthroTronix, Inc., Silver Spring, MD Software Engineering Intern *May 2013 – August 2013*
Learned the basics of Android app development and made a basic application; data analysis; Computer Vision to detect objects in images - *NDA*; made 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*)

Projects

Topics in Computational Linguistics

Analysis of phonations for speaker identification – analyzed the waveforms of speakers using SVMs (*Matlab*)

Introduction to Computer Vision – Group Projects

Semi automatically extracted the foreground; Feature detector to compare images; Panorama maker; Created 3D models from 2D images; Machine Learning to build a pedestrian detector (*C++*)

Relevant Course Work

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

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

Linguistics: Introduction to Linguistics; Topics in Computational Linguistics (*Matlab & Python*)

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

Skills and Interests

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

Git, Vim, Eclipse, JIRA

Data Science Club, Alpha Xi Delta