AKHILA ANANTHRAM

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EDUCATION

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

2012 - Present

Bachelors of Computer Science and Mathematics, GPA 3.553/4

Concentration: Artificial Intelligence

TJHSST - Thomas Jefferson High School for Science and Technology, Alexandria, VA GPA 4.242/4

2008 – 2012

PROFESSIONAL EXPERIENCE

Blackbird Technologies, Menlo Park, CA Artificial Intelligence Intern

May 2014 - August 2014

Detected 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, JSON, OpenCV, NLTK, sklearn, sktrain, word2vec*)

Cornell University, Ithaca, NY 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 scratch (Objective C)

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 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: Computer System Organization and Programming (*C*) • Data Structures and Functional Programming (*Ocaml*) • Discrete Structures • Object Oriented Programming and Data Structures (*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 (*Python*) • Machine Learning (*Python*) • Operating Systems (*Python & C*) • Information Retrieval (*Java*) • Introductory Design and Programming for the Web (*HTML*, *CSS*, *JQuery & PHP*)

SKILLS AND INTERESTS

Java, Python, C++, Matlab, Bash Scripting, Ocaml, Objective C, C, HTML, CSS, PHP, Scala, Haskell

Git, Vim, Eclipse, JIRA

Data Science Club (Vice President of Education), Alpha Xi Delta