Santi Santichaivekin

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Education

Harvey Mudd College Claremont, CA
B.S. in Computer Science, GPA 3.73 *Class of 2021*

Coursework

In progress: Computer Systems, Science of Debugging, Phylogenic Tree Reconstruction (Independent Study)
Completed: Data Structures and Program Development; Multivariable Calculus; Intro to CS (Advanced); Computability and Logic; Probability and Statistics; Linear Algebra; Differential Equations

Skills

Proficient : Python | Knowledgeable: C++, C, C#, Golang, Java, JavaScript, Bash, Prolog, R, web development, gdb, pdb, rr

Experience

Software Engineer Intern, *Uber ATG*, San Francisco, CA Summer 2019

- Description of Route Simplification project
- Description of Cloud Fleet Metrics project

CS Tutor/Grader, *Harvey Mudd College*, Claremont, CA Spring 2018 - Present

- Tutor and grade Computability and Logic class which teaches proof methods, automata, prolog, and computability theory.
- Wrote an autograder for prolog using python subprocess module (github.com/ssantichaivekin/prolog-grader)
- Tutor and grade CS For Insight class which focused on scripting and using python libraries for everyday tasks such as file management, web-scraping, machine learning, and HTML generation. Used Python.

Software Engineer Intern, *Microsoft*, Bellevue, WA Summer 2018

- Implemented an event queue to perform layout calculations in the background across multiple frames. This makes complex visual transitions in Microsoft Whiteboard application more responsive. Used C#.

Personal Projects

Halite3 AI Competition Bot (github.com/ssantichaivekin/halite3) Fall 2018

- Written evaluation functions to plan ship movements and navigate them around the game map without colliding. Used Python and then switched to C++.
- Used Evolutionary Algorithm (python) to fine-tune hyperparameters on DigitalOcean server.
- Finished with rank 201 out of 4014 total participants.

Text to Color Tone (github.com/ssantichaivekin/text-to-color-tone) Summer 2018

- Used Google Custom Search API and k-nearest neighbor algorithm to find a color tone of any text and display it on screen using matplotlib python library.
- Computed the color tone of different word category such as adjectives, nouns, verbs, words that start with "a", and words with first vowel sound "ow", using NLTK dictionary to group words and Digital Ocean cloud server to download images and perform calculations.

Honors and Awards

5th place in ACM-ICPC Contest SoCal Region, 2018
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1st place in Harvey Mudd College Microsoft Coding Competition, 2017