# Santi Santichaivekin

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#### Education

Harvey Mudd College

Claremont, CA

B.S. in Computer Science, Major GPA 4.00 (Cumulative GPA 3.60)

Class of 2021

#### Coursework

In progress: Data Structures and Program Development; Multivariable Calculus

**Completed:** Intro to CS (Advanced); Computability and Logic; Calculus (Advanced); Probability and Statistics;

Linear Algebra; Differential Equations

### **Skills**

Proficient: C++, Python | Knowledgeable: C#, C, Ruby, Java, JavaScript, Bash, Linux, R, web development

## Experience

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.
- Tutored and graded 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#.

Team Leader, Thailand National Software Contest 2016, Bangkok, Thailand

Spring 2016

- Arranged monthly meetings for 3-person team and headed application development.
- Designed a system for Thai word segmentation using maximum dictionary matching and exhaustive search in JavaScript.
- Deployed a web application to analyze the analyze rythms, sounds, rhymes, and alliterations of Thai poems using the International Phonetic Alphabet (IPA).

Member, Bodindecha School Robotics Team, Bangkok, Thailand

Spring 2014 - Fall 2016

- Implemented algorithms for robot movement in C and C++.
- Designed communication protocol for robot interactions via Bluetooth.
- Practiced weekly and competed in local competitions. Won several trophies.

# **Personal Projects**

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.

IPython Chemistry Calculator (github.com/ssantichaivekin/chem-calculator)

Spring 2018

• Developed a small python library to help with chemistry calculations. The project uses regular expression to read chemical formulas and BeautifulSoup to scrape Wikipedia for mass and thermodynamics data.

# Honors and Awards

5<sup>th</sup> place in ACM-ICPC Contest SoCal Region, 2017

1st place in Harvey Mudd College Microsoft Coding Competition, 2017

## **Hobbies**

Competitive Programming, Unicycling, Drawing, Painting, Subtitling Educational Videos.