# 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

Data Structures and Program Development

Fall 2018

CS-Principles and Practice, Computability and Logic

2017 - 2018

#### **Skills**

**Programming**: Proficient: C++, Python | Knowledgeable: C#, C, Ruby, Java, JavaScript, Bash

Language: Thai (fluent)

# Experience

## Software Engineer Intern, Microsoft, Bellevue, WA

May 18 - Jul 18

• Implemented a layout engine feature that perform layout calculations in the background across multiple frames. This feature allows for smoother and more responsive transition for complex visual elements in the Microsoft Whiteboard application.

### CS Tutor/Grader, Harvey Mudd College, Claremont, CA

Jan 18 - Present

• Tutored and graded students' works for CS35: CS For Insight class. The class focused on scripting and using python libraries for everyday tasks such as file management, web-scraping, basic machine learning, and HTML generation.

Team Leader, National Software Contest 2016, Bangkok, Thailand

Jan 16 - Jul 16

- 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 JavaScript web application to analyze the rythm and sound of Thai poems using the international phonetic alphabet.

Member, Bodindecha School Robotics Team, Bangkok, Thailand

Jan 14 - Oct 16

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

# **Personal Projects**

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

May 18 - Jul 18

- 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 do download image information and perform calculations.

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

Feb 18 - May 18

• 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.