

# Sung-Yan Hsieh

San Diego, CA

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David Hsieh is a MSCS student with one year of self-taught experience in Frontend and Software Engineering.

## SKILLS

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### Programming Languages

- JavaScript
- Python
- Java

### Technologies

- HTML5/CSS3
- Bootstrap4
- Git

### Tools

- VScode
- IntelliJ
- Heroku

## PROJECTS

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### BearMaps – Website

Java, KDTREE, Priority Queue, A\* Algorithm, Trie, Heroku

- Implemented the backend data structure and algorithms of a web application that resembles the features of Google Map including rastering, routing (finding the shortest path), autocomplete searching and navigation direction functions.

### Percolation – Java application

Java, Disjoint Set, Monte Carlo Simulation

- Achieved the visualization of percolation by building Disjoint Sets data structure and calculate Monte Carlo simulation.

### Personal Website – Website

HTML, CSS, JavaScript, Bootstrap

- Designed a website and enhance user interface and experience by using using HTML5, CSS3, JavaScript and Bootstrap framework.

### Weather Bot – Discord bot

Python, Discord API, OpenWeatherMap API, Heroku

- Launched an online bot using Discord API, coded in Python and hosted on Heroku. Respond to user's concurrent weather, anytime, anywhere using OpenWeatherMap API.

### PM 2.5 Detector – Android application

Java, Arduino, Android Studio, Blender

- Developed an Android application using Java and connected it with Arduino air quality sensor (PMS3003) by Bluetooth module.
- Designed the model of airbox to place the sensor by Blender, constructed with 3D printing.

## WORK EXPERIENCE

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### Taipei City Hall

Taipei, Taiwan

Alternative Military Service

Sep. 2020–Feb. 2020

- Catalog official documents of the Taipei City Government and maintain its website.

### Greennet Orchid Company

Chongqing, China

Summer Internship

July 2017–Aug. 2017

- Evaluated and determined the ideal environment for orchid flower growth by analyzing fertilizer proportion data.

## EDUCATION

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### University of California, San Diego (UCSD)

La Jolla, CA

M.S. in Computer Science and Engineering

Sep. 2021–June 2023(expected)

### National Cheng Kung University (NCKU)

Tainan, Taiwan

B.S. in Life Science

Sep. 2016–June 2020