Sung-Yan Hsieh

San Diego, CA

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Self-taught experience in Software Engineering and Web Development.

EDUCATION

University of California, San Diego	**La Jolla, CA**
M.S. in Computer Science and Engineering	09/2021~06/2023(expected)
National Cheng Kung University	**Tainan, Taiwan**
B.S. in Life Sciences	09/2016~06/2020

SKILLS

Programming Languages: Python, Java, JavaScript, C++, Haskell
Technologies: HTML5, CSS3, BootStrap, Node.js
Tools & OS: VSCode, IntelliJ, Heroku, Git, MacOS, Windows, Linux Ubuntu

PROJECTS

Personal

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 water 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 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.

Group

PM 2.5 Detector – Android application   **Java, Arduino, Android Studio, Blender**

Developed an Android application with intuitive UI design 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.
Delegated tasks with other two group members by organizing the project into design, develop and marketing parts.
Solved problems by communicating and separating technical problems into manageable tasks and earned a top grade.

WORK EXPERIENCE

Taipei City Hall	**Taipei, Taiwan**
Alternative Military Service	09/2020~02/2021

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

Greennet Orchid Company	**Chongqing, China**
Summer Intern	07/2018~08/2018

Evaluated and determined the ideal environment for orchid flower growth by analyzing fertilizer proportion data.
Followed through the entire manufacturing process in a startup company including tissue culture, large-scale planting to marketing strategies.