# **GWYNETH HUYNH**

Los Angeles, CA

• (714) 468-4546 • <u>huynhgwyneth@gmail.com</u> • <u>LinkedIn</u> • <u>GitHub</u> • <u>Personal Website</u>

## **EDUCATION**

### GEORGIA INSTITUTE OF TECHNOLOGY (4.00 GPA)

Atlanta, GA

Master of Science in Computer Science

2023-2025

### UNIVERSITY OF CALIFORNIA, LOS ANGELES (SUMMA CUM LAUDE – 3.99 GPA)

Los Angeles, CA

Bachelor of Science in Human Biology and Society

2017-2020

#### **PROJECTS**

### CAPSULE | JAVASCRIPT, PYTHON, HTML, CSS

- Developed a comprehensive end-to-end web application using **React** and **Node Express**.
- Integrated AWS S3 for cloud storage and MySQL database to manage and retrieve user-uploaded images.
- Designed and implemented a **collaborative filtering** recommendation system, enhancing user experience through personalized outfit combinations.

### TRADING BOT | PYTHON

- Developed trading strategy using **market indicators** such as price/SMA ratio, %B, and ROC that increased profits by 60% for in-sample data and 30% for out-of-sample data.
- Implemented **reinforcement learning techniques** to discern optimal trading signals based on the selected indicators.

#### SIMPLE DISTRIBUTED FILE SYSTEM | C++

- Communications via **gRPC** and **protobufs**, enabling efficient storage, listing, and retrieval of files on a remote server.
- Integrated **synchronization** and **caching** mechanisms, ensuring file consistency across multiple clients and threads.

### COURSEWORK/SKILLS

- Languages: Python, Java, JavaScript, SQL, R, Bash, CSS, HTML, C++, C
- Technologies/Frameworks: QIIME2, React, Node, Express, Django, MongoDB, MySQL
- Coursework: Data Structures and Algorithms, Operating Systems, Machine Learning, High Performance Computer Architecture, Computer Networks, Statistics

### **EXPERIENCE**

## CALIFORNIA NANOSYSTEMS INSTITUTE

Los Angeles, CA

#### **Bioinformatics Research Assistant**

2021-Present

- Developed and tested Bash and Python scripts to streamline pipeline commands and data entry, significantly reducing data processing time from hours to mere seconds.
- Led team through migration from an outdated bioinformatics data science platform to QIIME2.
- Utilized **R** and **Python** to generate comprehensive visualizations for diversity, differential abundance, principal component analyses.
- Employed **Machine Learning** (hierarchical clustering) to determine correlation between disease state and vaginal microbiome composition.

#### WORLD RELIEF SOUTHERN CALIFORNIA

Garden Grove, CA

# **Immigration Services Intern**

2018, 2021

- Led STEM classes, activities, and counseling sessions for refugee youth groups.
- Maintained and updated electronic legal record of 300+ clients (DACA, Green Card, Citizenship, U-visa).

## **ACTIVITIES/AWARDS**

• UCLA Wushu A team (September 2017 – December 2020) and first place at Wushu Collegiate team event (April 2019)