# **Raymond House**

#### **EDUCATION**

#### University of California, Irvine

Graduating Jun 2025 | Irvine, CA

• Major: Bachelor of Science in Software Engineering

• Minor: Bioinformatics

#### PROFESSIONAL EXPERIENCE

# Software Engineer Intern, NeuroLeap Corp.

2023 Sep – present | San Jose, CA

- Primarily focused on backend development, utilizing technologies like Golang for server-side logic and Vue.js for frontend interactions.
- Collaborated on specification and advice regarding software engineering implementations for our embedded systems and equipment

#### Student Researcher, UC Irvine School of Medicine

2023 Jul – present | Irvine, CA

- Contributed to the development of the Android version of a CNN-based app which identifies commonly used eyedrop medication.
- Engaged in open brainstorming sessions, valuing team input and integrating diverse ideas.
- Demonstrated initiative by proactively suggesting and presenting approaches to the team, leading to optimized app functionalities
- Leveraged our machine-learning model to display the expiration date of medicine bottles varying in format.

# Computer Lab Technician Intern, De Anza CompTechS

2022 Apr – 2022 Aug | Cupertino, CA

- Worked with a team composed of students and professionals to repair computers and offer them to students in need.
- Responsibilities included repairing and testing Windows 10, requisite drivers, and software for academic use.

Brand Representative, Hollister Co.

2021 Sep - 2022 Jan | San Jose, CA

# PERSONAL PROJECTS

#### RNA-seq Data Analysis and Visualization Toolkit, Python, Flask, Biopython, Matplotlib 🗵

- Created web-based interface using Flask, allowing users to upload RNA-seq data (FASTQ files) and reference genomes (FASTA files) for analysis
- Implemented automated quality control and preprocessing of raw RNA-seq data using Biopython, visualized using matplotlib and plotly.
- Leveraged JupyterHub and Voila to transform Jupyter Notebook into an interactive web application.

# Full Stack Bill Split App, Flutter, Dart, Firebase, ML Kit

- Managed back-end services and database operations with Firebase to establish user authentication with data privacy in mind.
- I integrated Firebase ML Kit to implement a receipt scanning feature, used to automate expense tracking.

#### Subreddit Sentiment Analysis, Python, HTML, Flask

- Web application engineered to utilize Natural Language Processing(NLP) to determine sentiment polarity associated with a search term within a user-specified subreddit.
- Synergized with the Google Sheets API to generate a spreadsheet detailing the results, categorized according to polarity.

## AI Malware Detection, Python, Qt, Docker, SkLearn, Pefile

- Developed a web application using Qt to scan Portable Executable files for malware using a machine learning model.
- Trained and tested the model using Scikit-Learn to achieve an accuracy of 99% based on file attributes that do not require executing the file.

## **RELEVANT COURSEWORK**

Data Structures and Algorithms (C++), Object Oriented Programming (C++), General Chemistry Series, Fundamentals of Digital Security, Discrete Mathematics, Multivariable Calculus, Linear Algebra, Differential Equations, Physics: Mechanics

## **SKILLS & INTERESTS**

## **Skills:**

C/C++, Python, Go, Dart, Java, Flutter, Flask, Qt, Kotlin, Postgres, Firebase, ML Kit, Scikit-Learn, Biopython, Matplotlib, Docker, HTML/CSS, Agile

## **Interests:**

Software Development, Bioinformatics, Genomics, Deep Learning, Neural Networks, Attending Hackathons, Snowboarding, Surfing