# **Dylan Vu**

#### **EDUCATION**

## University of California, Irvine (UCI)

Computer Science (B.S.) GPA: 3.88

Relevant Coursework: Data Structures, Object-Oriented Design, Assembly, Discrete Math, Linear Algebra

#### **TOOLS & FRAMEWORKS**

- Programming & Technologies: TypeScript, JavaScript, Node.js, Python, C++, Flutter, Dart, HTML, CSS
- Frameworks & Libraries: React, Express, Socket.IO, MongoDB, Firebase, JWT, Next.js, Selenium, Docker

## **EXPERIENCE**

## Software Developer Intern, Ansync Labs, El Dorado Hills, CA December 2021 - September 2022

- Coded Google Cloud Platform (GCP) serverless cloud functions in TypeScript with 100% unit test coverage
- Designed TypeScript Node app to run Flutter-ESP32 integration tests and ESP32 firmware stress testing, catching eight firmware over-the-air update bugs that would have bricked hundreds of IoT devices
- Advanced million-dollar preventative health project blocked for a week by debugging and updating bash & Node.js scripts used for device setup and quality assurance testing
- Utilized Docker and set up CI/CD GitLab runners for automated unit testing, integration testing, and version deployment for all 8 of company IoT products to streamline device testing process and ensure firmware code consistency during firmware deployment and testing
- Implemented Flutter web app with BLoC architecture to display IoT hand sanitizer station usage statistics to help market company's newest IoT device to potential customers

#### **PROJECTS**

# WordShip (SB Hacks VIII)

February 2022

**Expected Graduation: June 2024** 

- Managed 2 beginners to win "Honorable Mention" + "Best Space Themed App" for a Wordle shooter game built with Godot, React.js, Express.js, and WebSockets by delegating features and tasks to team members
- Orchestrated software architecture and integrated React.js and Godot via WebSockets and Express.js API

# Fosync (HackHarvard 2021 Hackathon)

October 2021

- Led team of 3 beginners to win "Most Creative Hack Using Twilio" for clothing inventory management app
- Engineered entire backend using Express, Socket.IO, and Twilio API and program Express.js API routes for a custom-designed account login and authentication workflow using JSON Web Tokens (JWT)
- Created CRUD functions to synchronize and manage global inventory across multiple retailers and brands

#### **GRIP Controller (LA Hacks 2021)**

March 2021

- Awarded 1<sup>st</sup> Place overall in LA Hacks and "Best in Track" for a novel responsive tactile VR controller
- Engineered hand-controller movement and object interactions in Unity using coordinates from MediaPipe
- Designed interactive Unity VR scene and implemented game physics using Unity's built-in physics system

#### **ORGANIZATIONS**

#### **UCSB American Society of Chemical Engineers**

October 2020 - Present

- Implement a TypeScript Job Postings bot to scrape and post 200+ entry level jobs and internships per week
- Create and maintain Node.js + MongoDB Discord bot to engage 50+ members with "Questions of the Day"
- Code a serverless backend in Next.js deployed on Vercel to schedule lab reservation time slots for projects