

AYUSH SATYAVARPU

ayushsatyavarpu@gmail.com | github.com/AyushSat | /in/ayush-satyavarpu

EDUCATION

University of California, Irvine | B.S, Computer Science: Networked Systems & Intelligent Systems | **GPA: 3.84** | **Graduation: 2025**
Relevant Coursework: Data Structures & Algorithms, Machine Learning, Computer and Network Security, Computer Networks, Software Engineering Principles, Linear Algebra, Discrete Structures, Software Testing, Software Design, Computer Vision

SKILLS & INTERESTS

Languages/Frameworks: JavaScript, GoLang, C++, MI, Python, Java, React, HTML/CSS, TypeScript, .NET, C#, SQL, Swift, SwiftUI
Software: Google Cloud Platform (API, JS SDK), AWS, Firebase, Android Studio, XCode, Git, Linux, Docker, MongoDB, Jenkins CI/CD
Interests: Cybersecurity, Web Dev, Game Dev, AI, Machine Learning, Cloud Computing, AR/VR, Finance

PROFESSIONAL EXPERIENCE

APPLE **Sunnyvale, CA**
June 2023 - Present
Health Backend Software Engineering Intern

- Improved upon Apple internal tools that allows employees to manage and test hospital API's interacting with the Health app
- Implemented **Java** API endpoints that provide specialized filtering while integrating with DB caches to reduce DB calls by 182%
- Used **React** and **TypeScript** to redesign the UI with an Apple style, and added functionality like automatic detection for failing tests on specific API's and customized charts to display overall summaries to improve user efficiency by ~350%
- Placed top 10 out of 150 teams in an Apple intern innovation contest, presented new, confidential features to Apple VPs

UC IRVINE STUDENT CENTER AND EVENTS SERVICES **Irvine, CA**
September 2022 - Present
Full Stack Web Developer

- Developed and migrated **.NET & C#** products from outdated, insecure authentication schemes(UCI WebAuth) to higher security **Shibboleth** IDP authentication schemes by redeploying products on different servers, and generated **SAML JWT** local auth tokens
- Improved student visitor experience by increasing study space availability after collecting and processing **JSON** data from physical Occuspace sensors installed in university spaces to report real-time occupancy data

VMWARE **Palo Alto, CA**
June - September 2022
Security and Compliance Engineering - Software Engineering Intern

- Saved >30 hours/week of engineering capacity by implementing products in **GoLang** allowing engineers/stakeholders to automate audit evidence gathering from compliance data sources like GitLab and AWS for compliance with regimes like **PCI & SOC2**
- Automated evidence bundle generation with compliance metadata such as attestation info, version history, release tags, and **anti-tampering security features** such as SHA256 checksums
- Engineered software to interact with internal VMware services to collect production code for presentation to auditors by analyzing Git repositories and their metadata and selecting specific git branches usable for auditing

INVIGRID **Sunnyvale, CA**
June - September 2021
Full Stack Software Engineering Intern

- Patched ~70% of fatal security vulnerabilities by developing a backend API in **Node.js** that performs security scans on **Google Cloud Platform** projects and internal resources (VMs, VPCs, Storage Buckets, SQL Instances) to find and remediate 86 of the most common security vulnerabilities, such as ensuring firewalls protect SSH from the Internet or disabling insecure service accounts
- Designed and programmed a multipage portal using **HTML**, **CSS**, and **JavaScript** where users can detect and patch any vulnerabilities found in their projects, configure and select projects to review, and author new security policies

PROJECTS

PETERPORTAL **Irvine, CA**
January 2022 - Present
Full Stack Developer

- Developed features of a website that describes UC Irvine courses, professor reviews, grade distributions, and course planners
- Used **React.js** and **Redux** to implement upvoting and downvoting on user reviews of courses and professors, allowing fellow students to share opinions without writing a full review
- Wrote backend **TypeScript** that validates users as UCI students using Google Authentication and communicates with a **MongoDB** NoSQL database to store **10,000+** documents of vote data, course reviews, and reported/flagged reviews
- Redesigned database schema to scale with spiking user reviews and votes, minimizing database calls by 70% on average

FINANCETRACKER **Sunnyvale, CA**
June - August 2023
Full Stack Developer, UI/UX Designer

- Developed an iOS application with **Swift** and **SwiftUI**, enabling users to log categorized transactions, set spending limits, and customize categories for tailored budget monitoring, while keeping all data secure and always on device
- Collaborated with Apple designers through 8 iterations for an intuitive UI that aligns with Apple's Human Interface Guidelines.
- Leveraged CoreGraphics to create dynamic, scrollable graphs that build upon Swift Charts, and also created a whole new chart from scratch to help illustrate ratios between categorized and total spending

EXTRACURRICULARS

2nd place, Cyber Collegiate Defense Competition Invitational | **Cyber @ UCI** | 2021 - Present
Vice President of Technology, **Alpha Kappa Psi** Professional Business Society | 2022 - Present