

ANDREW VU

Cybersecurity Engineer

Portland, OR | 503-954-7316 | andrewv11789@gmail.com

linkedin.com/in/andrewvu189 | github.com/Vuand | andrewvu.tech

SUMMARY

Computer Science graduate (Oregon State University, Cum Laude) with an undergraduate Cybersecurity Certificate and a security-first approach to software and systems engineering. Hands-on with secure software development, access control, applied cryptography, network security, and digital forensics through security coursework and projects spanning a startup, internships, and freelance work. Former NCAA Division I tennis player.

EDUCATION

Oregon State University — Corvallis, OR

09/2022 – 06/2026

B.S. in Computer Science | Cybersecurity Certificate (2026) | GPA: 3.51/4.0 | Cum Laude | Dean's List

Security Coursework: Network Security, Applied Cryptography, Digital Forensics, Security Governance, Usability Engineering

Core CS Coursework: Data Structures & Algorithms, Analysis of Algorithms, Operating Systems, Computer Networks, Database Systems, Parallel Programming

EXPERIENCE

StrokeVision — Co-Founder & Lead Engineer (Early-Stage Startup)

01/2026 – Present

React Native (Expo), TypeScript, Python, FastAPI, PostgreSQL, AWS S3, Secure API Handling

- Designed the app's security model: scoped each user's uploaded videos to that user in cloud storage (AWS S3), validated and constrained actions before execution, and flagged low-confidence inputs instead of guessing.
- Built the iOS app (React Native/Expo) on a Python/FastAPI backend with secure API handling and input validation across the client-server boundary; async pose-estimation pipeline runs in a background worker pool. TestFlight beta in progress.

Software Engineer (Freelance) — Gresham United Methodist Church, Gresham, OR

09/2025 – 12/2025

- Led a full platform migration (Wix to Framer) including domain transfer, DNS configuration, and email continuity to minimize downtime and avoid data loss during cutover.
- Integrated secure PayPal payment workflows and applied separation-of-concerns and input-handling practices while translating stakeholder requirements into controlled, maintainable changes.

Software Engineer Intern — Wholistic Peace Institute, Lake Oswego, OR

06/2025 – 08/2025

- Sole developer who designed, built, and deployed the organization's website end to end on Bluehost, including server configuration, hardening, and reliability.
- Built an API-driven checkout system on the Google Books API with secure PayPal/Stripe payment integrations and input validation.

PROJECTS

AI-Powered Home Assistant Integration — Senior Capstone | Python, OpenAI API, REST APIs, AsyncIO

- Built an AI Home Assistant integration with a secure execution layer that validates commands before they run, using an asynchronous architecture for concurrent request handling.

SponsorHub — Sponsorship Management Platform | Next.js, TypeScript, PostgreSQL, Prisma

- Built a full-stack platform with role-based access control (RBAC) enforcing authentication and authorization across user roles; modeled relational data in PostgreSQL via Prisma with background job processing (BullMQ, Redis).

TECHNICAL SKILLS

Security: Network Security, Threat Modeling, Vulnerability Assessment, Digital Forensics & Incident Response, Applied Cryptography, IAM, RBAC, HMAC Authentication, Secure API Handling, Input Validation, Risk Assessment & Compliance, Security Monitoring, Event Log Analysis, NIST Cybersecurity Framework, ISO 27001, Wireshark

Languages: Python, Java, JavaScript, TypeScript, C/C++, SQL

Web & APIs: Node.js, React, Angular, Next.js, HTML5, CSS3, REST APIs, JSON, XML, JSON Schema, Postman, Swagger, API Testing

Cloud & DevOps: AWS, GCP, Docker, Kubernetes, CI/CD, Git, GitHub, GitHub Actions, Linux, Windows

Databases: PostgreSQL, MySQL, MongoDB

AI/ML & Data: Machine Learning, Neural Networks, NLP, LLMs, Data Mining, Data Analytics, Computer Vision

Methodologies: SDLC, Agile, Scrum, QA Testing

LEADERSHIP & ATHLETICS

- NCAA Division I Men's Tennis, Portland State University — multiple USTA Junior Championship titles. Student Ambassador, Oregon State University.