

Edward Zhu

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EDUCATION

University of California, Irvine

B.S. in Computer Science, Minor in Mathematics - GPA: 3.94

Sep. 2023 – Dec. 2026

Irvine, CA

EXPERIENCE

SWE Intern - Dropbox

June 2026 – Sep. 2026

Core-Sync team

- Developed a **full-stack** system allowing team admins to apply setting updates to existing users devices
- Designed and implemented an idempotent, backward-compatible delivery model and database schema
- Produced safe production code utilizing **GrowthBook** for controlled feature testing and gradual rollout
- Pushed end-to-end changes across **React, Python, Go, Rust, and Protobuf APIs**

SWE Intern - GreenPeak.AI

June 2025 – Sep. 2025

Startup working on automatic AI content generation

- Engineered a **Model Context Protocol (MCP) Server** streamlining LLM integration with internal tools
- Built an automated media generation pipeline for producing music and video assets and uploading to Youtube
- Automated web interactions and content extraction using **Playwright**
- Created a **Google OAuth** token management system
- Authored system and user prompts for automated title and content generation

COMPETITIVE & CYBERSECURITY ACHIEVEMENTS

Collegiate Penetration Testing Competition (CPTC) - Global Champion

2025-Present

- Placed **first** at CPTC Global Finals on a team of six
- Wrote a **120** page technical report and executive presentation on **48** findings
- Orchestrated a **multi agent** penetration testing pipeline using **Claude Code**
- Utilized tools such as **Burp Suite** to exploit web application and service vulnerabilities
- Developed **bash** scripts to fuzz netcat connections and automate tooling setup

Collegiate Cyber Defense Competition (CCDC) National Champions - Team Alternate

2024-2025

- Sponsored for victors tour of Pentagon, CIA and FBI headquarters and met with NSA and CISA executives
- Proactively defended against red team attacks by implementing **host-based firewalls** and patches
- Deployed **dockerized** services and modified them through YAML-based configurations and volumes

Miscellaneous

2025-2026

- Won the grand prize of **\$1000** for first at the Information Tech Challenge security track
- Penetration tested employee facing web apps for the UCI Office of Information and Technology
- Participates in weekly **CTFs** focusing on web based challenges
- Developed malicious Terraria mod using **C#** that when loaded leads to RCE for learning purposes

PROJECTS

RAG Google Drive Document Assistant | *Python, Pandas, Google API, OpenAI API*

2024

Developed an end-to-end **RAG** system that extracts insights from a user's relevant Google Docs

- Leveraged the **Google Drive API** to store documents in **CSV** files
- Generated **vector embeddings** of document content using OpenAI's Embedding API for semantic understanding
- Implemented a vector search pipeline to identify and rank relevant documents based on user queries
- Integrated **OpenAI's GPT API** to generate context-aware responses grounded in retrieved document content

CERTIFICATES

• APIsec Certified Practitioner (ACP)

• Certified API Security Analyst (CASA)

TECHNICAL SKILLS

Languages: Python, C/C++, SQL, Java, Bash, PowerShell, PHP, C#, MIPS Assembly, Lisp, Prolog

Developer Tools: Git, GDB, Valgrind, Docker, VS Code, PyCharm, Vim

Other: Pandas, Keras, OpenCV2, Windows, Linux, Active Directory, Metasploit, NetExec, Burp Suite