Andrew McElhannon

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EDUCATION

Shiley-Marcos School of Engineering, University of San Diego San Diego, CA
B.A. Computer Science
G.P.A: 3.9 Expected May 2026

RELEVANT COURSEWORK

Principles of Digital Hardware; Operating Systems; Digital Hardware; Database Management Systems Design; Object Oriented Programming; Intro to Cyber Concepts and Tools, Cybersecurity Network Defense

CERTIFICATIONS

Network+, Security+

SKILLS

Programming Languages: Python, Java, HTML and CSS
Operating Systems: Microsoft Windows, iOS, and Linux

SCHOOL PROJECTS

Pipelined Processor, University of San Diego December 2025

- Continually improved on a pipelined processor design via SystemVerilog, a HDVL language
- Implemented concepts of forwarding and inter-stage registers to handle data hazards
- Ran benchmark tests to ensure proper and full functionality of the system

SurfBuddy, University of San Diego December 2024

- Worked with a team to create a scalable terminal application that fetched real-time environment data using an **API**
- Used the factory method to create objects such as geographic locations and user preferences

Adversys, University of San Diego Fall 2025- Present

- As a senior project, currently working collaboratively with 3 other students and a university professor to develop an existing software application meant for AI-based cybersecurity testing
- Coordinated with teammates to create and give presentations to peers, perform sprints, and implement an **agile-based** workframe

Generallt, Jean Cabot University April 2025

- Designed a fictional retail web domain with input from my instructor on organization and frontend layout
- Used **HTML** and **CSS** to design a coherent website that included clean UI, intuitive navigation, and aesthetic design and color-scheme choices
- Created the website as a minimum viable **prototype**, demonstrating intended functionality to a potential client

Cybersecurity Network, University of San Diego Fall 2025

- Created and managed a **network of several Linux-based VMs** on a physical host in order to experience proper networking and simulate potential attacks.
- Installed and configured a **pfSense** firewall VM to manage the network, setting it as a default gateway to protect network traffic
- Ran labs and simulations to test the integrity of the network, including running **Nessus** scans and performing brute-force password attacks