ALEXANDER EDWARDS

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EDUCATION

University of California, Los Angeles (UCLA), Los Angeles, CA — Expected December 2025

Bachelors of Computer Science GPA 3.65
- Conducted independent research in UCLA Cybersecurity Laboratory, focused on data attacks.
- GPA 3.65.

Moorpark College, Moorpark, CA — May 2023

Associate in Computer Science for Transfer
- GPA 3.96, Dean's List August 2021 - May 2023.

COMPUTER SKILLS

Programming Languages: Python | NumPy | Pytorch | Tensorflow | C# | C++ | C | Unix/Linux | Bash | Lisp | Java | JavaScript | React.js | React Native | TypeScript | Flask | Node.js | Next.js | Redux.js | HTML/CSS | WebGL | Git | Solidity | Assembly | Verilog.

Technical: Cybersecurity Fundamentals, Cryptography, Web Security, Web Application Development, Forensics, Phishing, Malware Analysis, Security Framework, log management, Ghidra, Operating Systems, Blockchain, Ethereum, Machine Learning, Computer Architecture | Embedded Systems, Computer Networking, TCP/IP, Full Stack, Frontend, Backend (Pinata, Google, Django, REST APIs, Postgres, Yarn, Web3, Docker), CUDA, Docker, Academic Research, Statistics, Troubleshooting, Microsoft Office Suite (Word, PowerPoint, Excel, etc.), Interpersonal Skills.

EXPERIENCE

3D Reconstruction Attack Research, Los Angeles, CA

Independent Undergraduate Researcher — March 2024 - Present
- Teamed up with an undergraduate and graduate researcher to analyze data poisoning vulnerabilities in the 3D reconstruction tools, Colmap, and publish on is security weaknesses.
- Explored the software's algorithm for possible attack strategies as well as executed and documented the experiment's results.

Ethereum-Sourced Package Registry Project / IEEE Paper, Los Angeles, CA

Backend Manager — June 2024 - August 2024
- Collaborated with 10 cybersecurity students to devise a new method for storage and redistribution of software packages, similar to PyPI, except it takes advantage of Ethereum's stronger blockchain security.
- Led 3 cybersecurity students in development of the backend calls to retrieve information off the deployed smart contract using mainly flask and web3 libraries in Python.
- Partnered in the development of the blockchain smart contract, it's functions and security modifiers using Solidity programming language and wrote the security analysis section in the paper.

Association of Computer Machinery, ACM Cyber, Los Angeles, CA

Cyber Academy and Phi Beta Rho Member — September 2023 - Present
- Engaged in Cyber Academy mentored education to become cybersecurity experts. Developed skills in Cryptography, Pwn, Reverse Engineering, and Web Security, tackling challenges designed to mirror industry demands.
- Served as a member in Phi Beta Rho, the official UCLA CTF team, to compete in live competitions every weekend against other cybersecurity groups to master complex problems. Specialized in web security and cryptography challenges.

Chaminade High School Eagle Engineering, West Hills, CA

FIRST Robotics Competition Programmer — August 2017 - May 2021
- Devised controls for object collection and drive subsystems in 2019, camera guided autonomous commands for drive, collection, and shooting in 2020, and researched new swerve drive subsystems in 2021.
- Elected Head Programmer 2021, mentored underclassmen in the use of java, designing user and autonomous commands in robotics, and managed robot's system development and research, all to aid the team in self development.

LEADERSHIP & INVOLVEMENT

Tutoring and Learning Center (TLC), Moorpark, CA

Math and Science Tutor — August 2021 - May 2023
- Taught students for 10 hours every week in conceptual knowledge, demonstrated problem applications, and illustrated critical thinking approaches to math and science, all helped to develop personal critical thinking and leadership skills.
- Held weekly review sessions for Calculus 2 students to help acquire greater knowledge of material to be used on assignments and exams.

Scouts of America Troop 604, Moorpark, CA

Eagle Scout — June 2014 - April 2021
- Conceptualized personal community service project, designed CAD and funded materials needed, and lead 4 volunteers over the course of 3 months in the construction of a little free library for the local Presbyterian church.
- Oversaw the organization of 10+ troop backpacking and camping trips. Held responsible for coordinating packing, vehicles, permits, and leading leading troop activities.