Alex Morales Flores

Research Interests: *Computer Security, Online Privacy, Networking Systems*

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Education

University of California San Diego | *GPA: 3.6/4.00* (Anticipated Graduation 2027)
- PhD. in Computer Science
- Advised by Dr. Imani Munyaka

University of California San Diego (2022 - 2024)
- M.S. in Computer Science | *GPA: 3.6/4.00*

Experience

University of California, San Diego| PhD Security Researcher *(2022-Present)*
- Security & privacy analysis of 60 Android loan apps using MobSF, Jadx, and custom Python tooling. Conducted reverse-engineering, permission auditing, and statistical evaluation to identify non-compliant data practices and regulatory gaps relevant to digital security policy, consumer protection, and threat-surface reduction.
- Full-stack experimental platform (Python, Flask, JS) integrating the OpenAI GPT API into a controlled Gmail-style interface. Ran a 295-participant security study, built backend logging & analytics. Conducted analysis to characterize LLM-driven cognitive offloading and its implications for human-AI security.
- Developing multilingual LLM spam/phishing detection pipeline using Python, Google Translate API, and multi-model LLM evaluation. Built automated scripts for dataset preprocessing, translation, and batch inference. Conducted cross-language robustness analysis, accuracy drift measurement, and statistical evaluation to identify linguistic biases and vulnerabilities in model-based email security systems.

California State University, Los Angeles| SMART Intern *(Summer 2022)*
- Developed a computer vision program for bird identification using Intel DevCloud's OpenVINO Inference Engine (matplotlib, numpy, cv2) for preprocessing and dataset generation.
- Completed embedded systems training, gaining hands-on experience with FPGA boards, Verilog, and hardware-level optimization within CSULA's Embedded Architecture Lab.

Coursework: Design Automation and Prototyping * Algorithms Design and Analysis * Principles of Software Engineering, Computer Security

Skills: Native Spanish Speaker, Agile Development, Unix/Linux, PGP implementation, Android Studio, Portainer, Docker, MobSF, Project Management, Linux Server Admin, GNU Debugger (GDB), Amazon Web Services (AWS), headscale/tailscale, self-hosting, homelab

Programming Languages: Python, C++, C, Matlab Programming, Android Debugging Bridge (ADB), BASH Scripting, R Programming

Selected Awards
- Computer Science & Engineering Departmental Fellowship
- Hispanic Scholarship Fund
- Edison STEM Scholarship
- OSHER NextGen Scholarship Award

Publications
- DOI: 10.1145/3733816.3760754
- DOI: 10.1109/ISTAS61960.2024.10732051
- DOI: 10.1109/ISTAS61960.2024.10732489
- DOI: 10.48550/arXiv.2410.16520