

# Enrique Sobrados

PhD Student, Computer Science

*University of New Mexico*

January 13, 2026

[esobrados720@unm.edu](mailto:esobrados720@unm.edu) — [esobrados.com](http://esobrados.com) — [github.com/enrique720](https://github.com/enrique720) — [linkedin.com/in/enrique-sobrados/](https://linkedin.com/in/enrique-sobrados/)

## RESEARCH OVERVIEW

My research explores security and privacy vulnerabilities in networked systems and mobile communications. I analyze how configuration practices and insecure protocols, such as in VPNs or SMS-embedded links, impact user safety. By applying machine learning to large-scale datasets, I aim to automate detection of privacy leaks, detect configuration anomalies, and develop viable solutions for secure deployment.

## EDUCATION

- |   |         |
|---|---------|
| • PH.D., Computer Science, University of New Mexico, Albuquerque, NM, USA<br>Advisor: Dr. Afsah Anwar | Present |
| • M.S., Computer Science, University of New Mexico, Albuquerque, NM, USA                              | 2025    |
| • B.S., Computer Science, University of Engineering and Technology, Lima, Peru                        | 2023    |

## TECHNICAL PUBLICATIONS

- [1] [NDSS'26] **MVPNAnalyzer: An Investigative Framework for the Security & Privacy Audit of Mobile VPNs.** *Wayne Wang\*, Aaron Ortwein\*, Enrique Sobrados\*, Robert Stanley, Piyush Kumar, Afsah Anwar, and Roya Ensafi* In: *Network and Distributed System Security Symposium (NDSS)*, 2026 (\* joint first authors)
- [2] [In Submission] **SpyChain: Multi-Vector Supply Chain Attacks on Small Satellite Systems.** *Jack Vanlyssel, Enrique Sobrados, Ramsha Anwar, Gruia-Catalin Roman, and Afsah Anwar*
- [3] [In Submission] **Private Links, Public Leaks: Consequences of Frictionless User Experience on the Security and Privacy Posture of SMS-Delivered URLs.** *Muhammad Danish, Enrique Sobrados, Bhupendra Acharya, Muhammad Saad, Abdullah Mueen, Sazzadur Rahaman, and Afsah Anwar*
- [4] [In Progress] **A Large-Scale Study of Legacy VPN Protocol Use and Misconfigurations.** *Enrique Sobrados, Muhammad Danish, Aaron Ortwein, Roya Ensafi, and Afsah Anwar*

## PROFESSIONAL EXPERIENCE

- |   |         |
|---|---------|
| • <b>Graduate Research Assistant</b> , University of New Mexico   | Present |
| – Built <b>MVPNAnalyzer</b> : extensible mobile-VPN auditing framework (DNS leaks, obfuscation, cleartext traffic, and OpenVPN configurations). |         |
| – Disclosed vulnerabilities to <b>40+</b> VPN providers, with <b>6</b> acknowledging vulnerabilities so far.                                    |         |
| – Enumerated infrastructure for $\sim 60,000$ VPN servers; reverse-engineered APIs to map <b>20+</b> endpoints.                                 |         |
| • <b>Software Engineer (Project Consultant)</b> , Meta-Innovaciones S.A.C., Peru  | 2023    |
| – Developed the front-end for <b>multiple</b> intake desk processes, including administrative litigation.                                       |         |
| – Performed secure code reviews and remediated <b>4</b> <b>security</b> weaknesses.   |         |
| – Automated taxpayer report generation using Jasper Reports + SpringBoot Backend, reducing manual processing effort by over <b>80%</b> .        |         |
| – Assisted in designing a <b>scalable database</b> architecture for multiple system modules, improving data consistency.                        |         |
| • <b>Security Analyst Intern</b> , National Bank, Peru  | 2022    |
| – Operated VPNs on <b>Palo Alto &amp; Check Point</b> (IPsec/IKEv2) for $\sim 2,000$ users.   |         |
| – Tuned <b>Forcepoint</b> web filtering; cut false positives <b>15%</b> while preserving business access.                                       |         |
| – Automated ATM key generation/rotation in <b>Bash</b> ; standardized ceremonies; saved <b>6 hrs/week</b> .                                     |         |
| – Ran vuln triage across <b>2</b> services; <b>5</b> issues remediated in <b>4</b> weeks.   |         |

## TEACHING

- |   |      |
|---|------|
| • <b>Guest Lecturer</b> , University of New Mexico — Intro to Cybersecurity | 2025 |
|---|------|

- **Teaching Assistant**, University of New Mexico — Intro to Cybersecurity 2024
- **Teaching Assistant**, University of New Mexico — Declarative Programming 2023
- **Teaching Assistant**, Le Wagon — Web Development Bootcamp 2021
- **Teaching Assistant**, University of Engineering and Technology — Intro to Object-Oriented Programming 2020

## SKILLS

1. **Programming Languages:** Python, C/C++, Java, Ruby, JavaScript
2. **Offensive Security:** Nmap, Burp Suite, Metasploit, Ghidra, Wireshark, Kali
3. **Web Development:** Angular, React/NextJS, Spring Boot, Rails, Bootstrap, Tailwind
4. **Cloud & Infrastructure:** Active Directory, Microsoft Azure, SQL Server, Docker, Kubernetes
5. **Machine Learning:** PyTorch, Keras, TensorFlow, LLMs, Meta Learning, RAG, GNN
6. **Languages:** Spanish, English, German
7. **Professional:** Team player, Leadership, Self-learning

## CERTIFICATIONS

- |                                       |                    |
|---------------------------------------|--------------------|
| 1. Junior Penetration Tester (eJPTv2) | INE Security       |
| 2. PEN-100, SOC-100, WEB-100          | Offensive Security |

## AWARDS & LEADERSHIP

- **President**, LoboSec (UNM CTF Team) Present
- **NDSS Fellowship**, Internet Society 2026
- **1st place — Top Scorer**, Alamo CTF 2025
- **CS Department Award**, University of New Mexico 2024
- **1st Place — Tracer Fire CTF**, Sandia National Laboratories 2023
- **ACSAC Student Conferencehip** 2023

## REFERENCES

Afsah Anwar, Assistant Professor  
 Department of Computer Science, University of New Mexico  
 E-mail: [afsa@unm.edu](mailto:afsa@unm.edu)