Santiago Espinosa Mooser

WORK EXPERIENCE

HexTrust May 2022* - Present

Senior DevSecOps Engineer (Intern \rightarrow L11 \rightarrow L12 \rightarrow L13 engineer)

Hong Kong

- Hardened access to production resources by deploying and maintaining PAM solution.
 - O Designed, implemented & deployed RBAC roles for AWS, Kubernetes, DBs, and Linux servers.
 - o This allowed for auditable and maintainable access to our production resources
- Deployed security infrastructure for Cloud Security Posture Management (CSPM).
 - o Implemented custom alerting related to Kubernetes and cloud services to better monitor our infra.
 - o Deployed integrations with multiple cloud providers to increase visibility into our cloud infrastructure.
- Designed and implemented CICD pipeline to migrate critical services to distroless containers
 - o Proposed, designed and implemented pipeline to build, sign, deploy, and debug distroless containers.
 - Organized technical talks for developers to explain the change & how to work with them.
 - o Coordinated and guided developer teams' migration to distroless containers.
 - o Modified internal helm chart template to allow for easier debugging of distroless containers.
- Organized, launched and ran private bug-bounty program. Responded to reports as needed & coordinated fixes.
- Served as internal counsel for developers, including for questions about cryptographic security.
- Augumented security tooling and CICD pipelines using Python and Bash.

Handshake Networking

May 2020 - Jan 2022*

Penetration Tester Intern (intern → part-time)

Hong Kong

- Designed, developed, and deployed Django-based (Python) security scanner.
- Carried out penetration tests and assisted in report writing.
- Managed and maintained on-prem company servers and deployment various services (Gitlab, Bookstack, ...)

PWC (New Ventures team)

Jun 2019 - Dec 2022*

DevOps Intern (intern \rightarrow part-time)

Hong Kong

- Reduced provisioning time of company servers from 3-5 business days to 30-45 minutes by automating provisioning with Ansible and Terraform.
- Deployed and maintained internal messaging tool (Mattermost), including backups.

EDUCATION

The University of Hong Kong

Sep 2018 - July 2023

B.S Engineering, Computer Science

Hong Kong

• Relevant coursework: <u>Algorithmic game theory</u>, <u>Advanced algorithm design & analysis</u>, <u>Discrete Mathematics</u>, <u>Cryptography</u>, <u>Compiling techniques</u>, <u>Functional programming</u>, <u>Principles of programming languages</u>.

Projects

Automated provisioning of YubiKeys

Automated provisioning of YubiKeys to allow developers to sign code commits in codebase. [1]

Trading competitions

■ **Participated in IMC trading competition**: analyzed trading data & implemented bonds, ETFs and stock trading strategies. Finished 729 out of 10,000+ teams, top 15 in Hong Kong (out of 110+) [1] [2].

SKILLS & INTERESTS

- **Skills:** Automation (python, bash); Linux Management; Reverse engineering; Containerization; Statistics, Low-level programming (C, Assembly, logic flow diagrams); Debugging
- Interests: Self-hosting; Systematic trading; Muay Thai; Strategy video games; Running; Self-hosting; Board games; Ethical hacking; Economics