

PROFILE

Computer Science Master's student at Sorbonne Université, specializing in networking, with experience in application development, IT administration, and B2B technical support. Skilled in Python, Java, FastAPI, PostgreSQL, and Docker. Developed a security event correlation platform integrating REST APIs. Seeking a 4–6 month internship in software or backend development. Available from November 2026, with flexible start dates.

SKILLS

Programming:

Python, Java, C++, Bash

Backend Development:

FastAPI, REST APIs, SQLAlchemy, API key authentication

Databases:

PostgreSQL, MySQL, MongoDB

Tools & DevOps:

Docker, Linux, Git, GitHub Actions, Render, CI/CD

Networking & Security:

TCP/IP, VPNs, firewalls, endpoint security, incident analysis

LANGUAGES

English - C1

Spanish - Native

French - B2

Isaac Balam Rodriguez Arellano

COMPUTER SCIENCE MASTER'S STUDENT | SOFTWARE & BACKEND DEVELOPMENT

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MAIN PROJECT

NetSentinel Lab — Backend Security Event Analysis and Correlation Platform

Application built with Python, FastAPI, PostgreSQL, and Docker to process and correlate security events.

- Designed and developed REST APIs for ingesting Falco-style and Suricata-style security events.
- Implemented incident correlation logic, severity level management, and attack-chain tracking.
- Integrated PostgreSQL and implemented API key authentication.
- Developed automated tests with pytest and configured a CI pipeline using GitHub Actions.
- Deployed the application on Render.

https://github.com/balam0o/NetSentinel-Lab

WORK EXPERIENCE

Technical support engineer

Ziff Davis (VIPRE antivirus)
July 2023 - July 2024

- Provided B2B technical support for endpoint security and networking solutions, managing 15–20 incidents per day.
- Diagnosed and resolved connectivity, VPN, firewall, and network performance issues.
- Performed root-cause analysis and resolved technical incidents across systems and network environments.

IT Administrator

Operadora de servicios integrales
September 2022 - July 2023

- Managed and maintained IT systems and local network infrastructure.
- Developed and maintained the company's internal website.

Software Development Intern

Continental Automotive
February 2022 - July 2022

- Developed a Java application to analyze and determine optimal locations for electric vehicle charging stations.
- Automated internal reporting processes, reducing manual work by 30%.

Technical support agent

Teleperformance
May 2015 - May 2019

- Provided technical support for internet, television, and telephone services in the US market, including connectivity troubleshooting.

EDUCATION

Master's Degree in Computer Science — Networking Specialization

Sorbonne Université
Paris 2024 - Expected 2027

- Research project: Development of an advanced traceroute technique to identify network paths and latency between autonomous systems (AS).

Bachelor's degree in Computer science

Universidad de Guadalajara
Guadalajara 2017 - 2022

- Final project: Development of a modular web application integrating an AWS Lex chatbot and MongoDB, with API-based service integration.

LINKS

GitHub: https://github.com/balam0o

Portfolio: https://balamrodriguez.com/

LinkedIn: https://www.linkedin.com/in/isaac-balam-rodriguez-arellano-a4658421a/