

Gian Zignago

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EDUCATION

University of California, Los Angeles (UCLA)

Master of Science in Computer Science

Sep 2023 – Dec 2024

Los Angeles, CA

University of Missouri

Bachelor of Science in Computer Science

Aug 2019 – May 2023

Columbia, MO

SKILLS

Programming Languages: Python, Ruby, C++, C, Rust, Go, TypeScript, Bash/Shell Scripting

Technologies: Git, Linux, PostgreSQL, Spring, Kafka, MongoDB, InfluxDB, RabbitMQ, SQL

Tools: Docker, Kubernetes, AWS, Postman, Grafana, Prometheus, GitLab CI/CD, Jenkins, Ansible, Elasticsearch

WORK EXPERIENCE

Software Engineer

Cisco Meraki

Aug 2023 – Sep 2024

San Francisco, CA

- Spearheaded a Ruby on Rails network tool that provided detailed insights into broadcast storm occurrences; achieved a 30% reduction in downtime during critical network incidents, enhancing customer satisfaction.
- Employed Kafka and RabbitMQ for real-time switch event streaming, enabling faster incident response and increasing topology accuracy by 30%.
- Automated API testing with Postman, reducing testing time by 12% and ensuring accurate network validation.
- Integrated PostgreSQL for data storage in network compliance systems, increasing data query efficiency by 5%.

Software Engineer Intern

Cisco Meraki

May 2023 – Aug 2023

San Francisco, CA

- Deployed an inspector testing framework for Snort 3 using Ruby, Jenkins and Ansible on multi-core MX routers, improving test coverage by 70% in 4 weeks and supporting the MX650 SD-WAN worldwide launch.
- Optimized security policies for MX appliances, enabling faster deployment of firewall configurations across 1,000+ distributed nodes.

Software Engineer Intern, Secret-Level Clearance

Johns Hopkins University Applied Physics Laboratory

May 2022 – Aug 2022

Laurel, MD

- Architected a sensor framework using Docker and RabbitMQ to aggregate and analyze real-time bandwidth and latency data, improving network slice configuration accuracy by 30%.
- Developed a REST-based data pipeline using Elasticsearch and Python to integrate real-time sensor data with a network orchestration protocol, enabling resource adjustments and improving slice performance by 25%.

Software Engineer Intern

MITRE

May 2021 – Feb 2022

McLean, VA

- Prototyped an SDN-based emulator for LEO networks using Docker, SGP4, and Grafana, scaling to 100,000+ nodes while supporting adaptive routing and prioritization, enabling simulation of networks at real-world orbital scales.
- Streamlined priority queuing with Linux TC filters and DiffServ, reducing high-priority packet latency by 9%.

LEADERSHIP EXPERIENCE

Lead Software Engineer, Missouri S&T Satellite Research Team

- Directed development of data-handling software for a satellite testing stereoscopic imaging, coordinating projects across technical disciplines and ensuring preparedness for the project's successful launch into low Earth orbit.

Aug 2019 – Jun 2021

Lead Software Architect, Missouri S&T Mars Rover Design Team

- Recruited and mentored a 7-person Agile team to design, develop, and test C++ code for a multi-terrain robot, directly contributing to the team's 3rd place finish out of 36 teams at the 2021 University Rover Challenge.

Nov 2019 – May 2021

PROJECTS

Zero Trust Security for Drone Networks | QUIC, PyMC3, NS-3, Nvidia Jetson TX1

github.com/flypaw

- Integrated QUIC for drone communication, reducing latency by 15% and improving data transmission reliability.
- Created deployment scripts for network traffic experiments, improving SrsRAN and iperf3 testing efficiency by 20%.