Gian Zignago

gianzignago@gmail.com | gianzignago.com | linkedin.com/in/zignago | github.com/zignago

EDUCATION

University of California, Los Angeles (UCLA) **Sep 2023 – Dec 2024**
Master of Science in Computer Science *Los Angeles, CA*

University of Missouri **Aug 2019 – May 2023**
Bachelor of Science in Computer Science *Columbia, MO*

SKILLS

Programming Languages: Python, C++, C, Rust, Bash shell scripting
Technologies: Linux, Docker, Kubernetes, InfluxDB, Kafka, SQL, PostgreSQL, Spring, Terraform
Tools: RabbitMQ, Git, Postman, Grafana, Jira, GitLab CI/CD, Elasticsearch, Jenkins, Wireshark
Security Clearance: DoD Secret, Active

WORK EXPERIENCE

Software Engineer III **Feb 2023 – Present**
General Atomics *Denver, CO*

- Developed a reusable satellite ground station software from scratch using Grafana and InflluxDB to handle real-time telemetry streaming and visualization, reducing setup time for new missions and empowering ground operators.
- Built telemetry ingestion and alerting pipelines for satellite ground stations, enabling operators to monitor subsystem health in real time and respond proactively to anomalies.

Software Engineer II **May 2023 – Sep 2024**
Cisco Meraki *San Francisco, CA*

- Employed Kafka and RabbitMQ for real-time switch event streaming, enabling faster incident response and increasing topology accuracy by 10%.
- 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, improving customer satisfaction.

Research Engineer, Distributed Systems **Aug 2022 – May 2023**
University of Missouri College of Engineering *Columbia, MO*

- Led development of a distributed sensor fusion pipeline integrating vision, lidar, and radar inputs to power real-time situational awareness tools for autonomous systems, reducing detection latency by 30%.

Software Engineer Intern **May 2022 – Aug 2022**
Johns Hopkins University Applied Physics Laboratory *Laurel, MD*

- Utilized Wireshark and custom diagnostics tools to trace and mitigate packet loss in real-time sensor networks, ensuring robust communication across distributed embedded nodes.
- Deployed 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 **May 2021 – Dec 2021**
SpaceX *Hawthorne, CA*

- Prototyped IPC-based coordinate transformation libraries to standardize spatial reasoning across subsystems, increasing interoperability and reducing error propagation between planning and control modules.

Lead Software Engineer **Aug 2019 – May 2021**
Missouri S&T Satellite Research Team *Rolla, MO*

- 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.

PROJECTS

URC Mars Rover | *C++, TypeScript, Nvidia Jetson TX2, CUDA, Agile* github.com/Missouri-MRDT

- 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.
- Wrote and maintained field-deployable robotics software in C++ and Python with emphasis on system reliability, maintainability, and direct operator feedback from field tests.