Melvin Orichi Socana

melvinsorichi@gmail.com | 910.461.9318 | https://www.linkedin.com/in/melvin-orichisocana/ | github.com/anmelus

EDUCATION

Stanford University, Stanford, CA, GPA 3.55   September 2022 – May 2024
Master of Science (MS): Electrical Engineering (Hardware & Software)

North Carolina State University, Raleigh, NC, GPA 3.43   August 2018 – May 2022
Bachelor of Science (BS): Electrical & Computer Engineering

EXPERIENCE

Amazon, Seattle, WA   May 2023 – August 2023
Software Development Engineer Intern – Amazon Photos
- Spearheaded the development of 'Albums' feature for Amazon Photos software in C# and .NET framework.
- Authored a comprehensive design document that delineated project scope and architecture, expediting development, and ensuring alignment with shareholders. Communicated with cross-functional teams and non-technical stakeholders.
- Engaged in rigorous code reviews and collaborated with senior developers to fortify code quality.

Intelligent Wireless Networking Laboratory, Raleigh, NC   February 2022 – May 2022
Machine Learning & Wireless Networking Research Assistant
- Collaborated with **Cisco** & PhD candidate to troubleshoot and optimize 5/6G O-RAN network architecture.
- Implemented ML models on small nodes, showcasing the feasibility of federated learning on limited hardware.

Active Robotic Sensing Laboratory, Raleigh, NC   August 2021 – May 2022
Robotics and Computer Vision Research Assistant
- Led development on the imaging system for the BenchBot, a robotics device designed to identify species and estimate biomass.
- Designed and implemented a robust script to interface with DepthAI cameras and servos, capturing high-quality plant images to train machine learning models.

Johnson & Johnson, Santa Clara, CA   May 2021 – August 2021
Embedded Systems R&D Engineer Intern
- Engineered a diagnostic board for rapid verification of communication protocols (I2C, SPI, CAN), yielding 20-30% cost and time savings in development, test, and verification procedures.
- Authored functional testing protocols and reports for complex electronic assemblies.

Laser Product Safety LLC, Raleigh, NC   September 2020 – March 2021
Junior Laser Engineer
- Collaborated with clients, acting as a technical consultant to provide guidance on laser safety classifications and compliance improvements.
- Performed physics calculations to determine device classifications according to international safety regulations (e.g. IEC 60825).

TECHNICAL SKILLS

Programming Languages	Python, C, C++, C#, Go, JavaScript, TypeScript, MATLAB, SQL
Software & Tools	Linux, MySQL, NoSQL, Docker, KiCad, Git
Frameworks & Libraries	.NET Core, PyTorch, NodeJS, React, Selenium, NumPy
Cloud & DevOps	AWS, GCP, Kubernetes, REST API, TCP/IP, CI/CD