

Eugenio Kuri Muzquiz

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PROFESSIONAL SUMMARY

Software engineering intern with experience building production-quality systems across autonomous robotics, ML pipelines, and data-intensive platforms. Proficient in C++, Python, and Go with hands-on work in distributed systems, edge inference, and cloud tooling. Brings strong engineering fundamentals from a Data Science degree at the University of Michigan and a track record of delivering reliable, well-tested software in fast-moving environments.

EDUCATION

University of Michigan

Bachelor of Science in Engineering (B.S.E.), Data Science. Minor: Applied Mathematics.

Ann Arbor, MI

2024 - 2028

EXPERIENCE

Software Engineer

05/2026 – 08/2026

Merlin Drones

Remote

- Designed and implemented a collision avoidance system in Go for autonomous drone swarms, scaling the platform from a few drones to a fleet of 8 active drones through integration of ROS 2, PX4, ORCA, and LiDAR.
- Built an edge perception pipeline on Raspberry Pi CM4 using YOLO/ONNX and OpenCV, enabling accurate GPS localization and continuous target tracking across the swarm.
- Implemented end-to-end MAVLink command workflows for mission cancellation, in-flight recovery, and transit-speed control, improving operator control and mission flexibility across the swarm platform.
- Engineered a one-command Gazebo simulation test harness for obstacle climb-over scenarios, automating validation and supporting repeatable regression testing in CI/CD pipelines.

Software Engineer

May 2025 – August 2025

embeddingLABS

Remote

- Engineered an automated bookkeeping platform in Python that transformed invoices and bank statements into double-entry journal entries, reducing manual processing and improving bookkeeping accuracy.
- Automated client onboarding by deriving bookkeeping rules from historical ledgers with LLM-assisted fallback and validation pipelines, scaling the platform from 3 customers to at least 10.
- Replaced a vision-based bank statement extraction pipeline with a deterministic pdfplumber parser, streamlining document processing and reducing operational complexity.

Instructional Aide

January 2025 – April 2025

Michigan Department of Robotics

Ann Arbor, MI

- Mentored over 10 undergraduate robotics teams on system architecture, mechanical design, electronics integration, and software debugging, improving project quality and accelerating technical problem-solving.
- Developed iterative testing protocols that accelerated hardware-software debugging across 8 capstone robotics projects, improving system reliability and integration efficiency.

PROJECTS

AdHoc-LM

PyTorch, CUDA, Distributed Training

- Implemented a 7.5M-parameter decoder-only transformer from scratch in PyTorch, including byte-level BPE tokenization, multi-head causal self-attention, custom LayerNorm, KV caching, autoregressive decoding, and mixed-precision distributed training.
- Built an end-to-end language model pipeline with custom training, inference, benchmarking, visualization, and retrieval-augmented generation (BM25 + dense retrieval + reciprocal-rank fusion + MMR), achieving 1.4528 validation loss on Shakespeare with 56 automated tests.

Internship Aggregation Platform

Python, Pytest, Ollama, Google Sheets API

- Built an automated data pipeline that processed 14,800+ community-sourced job postings into approximately 500 active U.S. technology internships in under 2 seconds through normalization, deduplication, validation, and multi-format export.
- Implemented optional local-LLM classification, retry/backoff logic, Google Sheets synchronization, and a comprehensive automated testing suite with CI across multiple Python versions.

SKILLS

Languages: C++, Python, Go (Golang), SQL, TypeScript, JavaScript

Cloud & Tools: Google Cloud Platform (GCP), Firestore, BigQuery, OpenAI API, Git, Linux, Docker

Robotics & AI: ROS 2, PX4, Gazebo, MAVLink, OpenCV, YOLO, ONNX, PyTorch, CUDA