

Ken Mosquera

Remote Flexible Work | *Applied AI Systems Engineer* | [Email](#) | [Contact](#) | [GitHub](#) | [Portfolio](#) | [LinkedIn](#)

Education

B.S. Mechanical Engineering in Mechatronics

Technological Institute of the Philippines — Expected April 2028

- **Relevant Coursework & Prior Studies**

FEU Tech (2022–2026) — Completed substantial coursework toward B.S. Mechanical Engineering in Mechatronics

- **President**, Mechanical Engineering Organization
- **President**, ASHRAE FEU Tech Student Branch
- **AI Ready ASEAN Youth Challenge** (2026) Participant

Professional Summary

Systems-oriented engineer focused on AI runtimes, local-first computing, and high-performance infrastructure. Experienced in Rust, WASM, Tauri, and GPU-accelerated local inference.

Projects & Engineering Initiative

FRUST — Open Source Local WebGPU-Accelerated AI Inference Engine *Independent*

- Engineered an open-source local-first AI desktop runtime using Rust, Tauri 2.0, WASM, and Candle-based inference
- Engineered local-first AI desktop runtime using Rust, Tauri 2.0, WASM, and Candle.
- Built lightweight Electron alternative with GPU-accelerated inference for offline LLMs.

BME — Cloudflare-Native Private First Scalable Web Application *Independent*

- Developed high-performance client-side PWA using Rust + WASM.
- Migrated infrastructure to Cloudflare, eliminating recurring hosting costs.

Professional Experience

Full-Stack Web Redevelopment | Ayoo | Dec 2025 - May 2026

- Led full-stack redevelopment of a struggling platform, implementing secure, scalable infrastructure that prevented bankruptcy.
- Designed zero-downtime serverless architecture on Cloudflare, eliminating **100%** of recurring hosting costs while handling traffic spikes.

Leadership Experience

President & Project Manager | ASHRAE FEU Tech Student Branch | Mar 2024 – Aug 2025

- Secured expedited invitation from ASHRAE South Korea Branch and sent 3 attendees to ASHRAE CRC Korea 2025
- Served as Project Manager for technical events and negotiated international & local sponsorships.

President & Project Manager | FEU Tech Mechanical Engineering Chain of Societies | Jul 2023 – Aug 2024

- **Revived** a stagnant engineering organizations federation and successfully reopened operations.
- Led membership drive that secured **₱28,550** budget.
- Served as Project Manager for PSME 2023 National Event, managing **60+ attendees**.

Technical Skills

- **Languages:** Rust, TypeScript, JavaScript, Python, SQL, C++, C, Ruby
- **Frontend:** Leptos, React, Next.js, TailwindCSS, WASM, Vite
- **Backend & Infrastructure:** Node.js, Express.js, APIs, Cloudflare Ecosystem, Linux, Tauri 2.0
- **AI / Inference:** Candle, Local LLM Inference, GPU-Accelerated AI Workflows
- **Databases & Systems:** PostgreSQL, SQLite, Local-first Architecture, Performance Optimization, Runtime Engineering
- **Certifications:** Anthropic (Model Context Protocol, Claude API, Code in Action) | Cisco C++ Advanced | Oracle Cloud Infrastructure | AWS Emerging Talent & ML Foundations | AI Leadership & Strategy (8+ NASBA/PMI Certs) | NVIDIA Base Command Manager Administration