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SKILLS

Languages: Python, Go, C#, JavaScript, TypeScript, SQL
Web and Backend: FastAPI, Flask, React, Next.js, Vite, Tailwind CSS, .NET, Fiber
Data and Databases: Cosmos DB, PostgreSQL, Qdrant, Microsoft SQL Server, SQLite, Pandas, Pydantic
AI and ML: PyTorch, LangChain, Langsmith, Semantic Kernel, Google VertexAI, Pinecone, Azure Foundry, Azure OpenAI
Cloud and DevOps: Azure DevOps, Docker, Firebase, Hetzner, Nginx, Gunicorn, Ubuntu, Windows Server 2022, Power Automate

EXPERIENCE

AI Engineer Intern, Emerson - Metro Manila MAR 2026 - JUL 2026

- Designed AI agents with **Semantic Kernel** and **Azure Foundry** for detecting software security vulnerabilities.
- Developed upgrades and implemented bug fixes to **Emerson DeltaV cybersecurity compliance software** using .NET 8, decreasing interim release cycle by **2 weeks**.
- Built **Azure DevOps** CI/CD pipelines that reduced manual build and deploy time by **85%**.
- Delivered workflow improvements that saved **800 analyst hours** and reduced completion time to **67 seconds**, contributing to **\$50,000 in reported cost savings**.
- Contributed to **Model Context Protocol (MCP)** secure development compliance software and hardening guidelines, creating coverage for **50%** of current departmental AI Agent projects.

Freelance Software Engineer, Albawani Co. - Remote AUG 2025 - JAN 2026

- Developed an internal HR automation tool in Python that generates attendance summary reports for **10,000+ employees**.
- Integrated the system with existing IT infrastructure on **Hetzner bare-metal servers** using **Python**.
- Implemented authentication and role-based access control using **Microsoft Entra ID** to protect employee data.

GenAI Research Intern, JG Summit Holdings Inc. - Metro Manila JUN 2025 - AUG 2025

- Developed and deployed a full-stack GenAI BI Dashboard for the Treasury Department using **Azure OpenAI**, **LangChain**, and agentic **RAG** across **12+ data sources**, reducing manual workflow time by **70%**.
- Built data validation pipelines with **SQL** and **Pydantic**, processing **500+ monthly data points** and achieving **93% accuracy**.
- Structured the project architecture and documentation for a 4-component system, enabling 3 full-time engineers to deploy to production within **3 days of handoff**.

PROJECTS

AGOS: Agentic Philippine Market Intelligence Platform | Full-Stack Developer

- Architected a multi-service market intelligence platform (React, FastAPI, Cosmos DB), engineering data ingestion pipelines that processed **350+ data points every 15 minutes** for real-time stock forecasting, reducing ingestion latency by **over 60%**.
- Hardened microservices** using FastAPI dependency injection for server-side Firebase JWT verification, parameterized Cosmos DB queries to prevent injection attacks, and route-specific rate limiting via SlowAPI.
- Engineered a stateful, streaming financial research agent using LangGraph and the Gemini API, orchestrating **5 custom tool registries** to deliver real-time, structured market analysis with **sub-second** streaming latency.

MediSeen | Full-Stack Developer

- Led a team that built an award-winning (1st place) Agentic AI progressive web application for clinical decision support, recognized at **International Conference on Artificial Intelligence (ICAI 2026)**.
- Engineered Azure-based microservices with **98 ms** database query latency and **400 ms** average AI time-to-first-token latency.
- Developed a responsive viewport for mobile using Tailwind CSS; increased system usability score by **15%**.
- Hardened the application with middleware-level protections, secure routing practices, and **Cloudflare DNS** configuration.

CNN-Osteo | Embedded AI Engineer

- Coordinated with a non-technical team to train a Convolutional Neural Network based on MobileNet architecture using TensorFlow for osteoarthritis detection. Award winning (1st place) at **Cavite Innovex 2025 Colloquium**
- Reported 99.40% validation accuracy and **98.19% test accuracy** on a split of 1,572 training images, 664 test images.

Alersense | Full-Stack Engineer

- Built an ESP32-based attention-monitoring system with a Python inference data hub, Flask-SocketIO API, and Next.js real-time alert dashboard.
- Implemented HTTP JSON telemetry ingestion for heart rate, SpO2, temperature, and related sensor metrics, then broadcast processed alerts without page refresh.

Formal Language Compiler | Full-Stack Developer

- Built a web compiler using TypeScript and Flask for visualizing deterministic formal languages.
- Separated DFA simulation logic from Flask routes and added pytest coverage for behavior against formal definitions.

EDUCATION

De La Salle University - Dasmariñas GPA: 3.5/4.0

Bachelor of Science in Computer Science with Specialization in Intelligent Systems (AI)

- Relevant Coursework:** Programming, Data Structures, Algorithms, Machine Learning, Databases, Web Development, Networking, Operating Systems
- Extra-Curriculars:** Secretary, Codesey Program Head - Computer Science Program Council
- Consistent Dean’s Lister:** 2022-2025
- Leadership Awardee Recipient**