Alister Marc B. Domilies

📍 La Trinidad, Benguet • ✉ alistermarcdomilies@gmail.com • 📱 +639493777776 • 🌐 alistermarc.github.io

Experiences

Those Who Care   Florida, USA (Remote)
Data Analyst / Scientist   October 2024 – Present
- Designed and deployed a predictive kept model, reducing error rates by 10%+ compared to legacy models.
- Automated workflows with Google Apps Script, significantly cutting reporting turnaround.
- Built and maintained data pipelines for integrating incoming new data to data warehouses.
- Developed Looker dashboards providing actionable insights to clients and leadership.

Netopia AI   Mandaluyong City (Remote)
AI Engineer Intern   August 2024 - October 2024
- Engineered LLM pipelines (LLaMA-based) to simulate human reactions to political statements.
- Optimized prompt engineering and input structures, to improve model relevance.
- Prototyped a retrieval-augmented chatbot integrating NL queries with database retrieval.

Petron Corporation (Refinery)   Limay, Bataan
Hydrogen Process Engineer / Data Analyst   Mar 2022 – July 2024
- Built predictive models for catalyst lifecycle, extending lifespan by 3 years and saving ₱50M.
- Optimized blowdown process, cutting 30% water use (20,000 L/day) and 20% chemical costs.
- Applied machine learning methodologies to analyze and explore refinery datasets to extract valuable insights for process optimization.
- Developed and maintained Power BI dashboards for weekly highlights of process parameter conformities.

Education

University of the Philippines – Diliman | *M.Eng. in Artificial Intelligence* | **Sep 2023 – Jun 2025**

- **GWA:** 1.175
- **Relevant Coursework:** Introduction to AI, Computational Linear Algebra, Probability & Statistics, Classical Machine Learning, Advanced Machine Learning, Machine Learning Operations, Natural Language Processing.
- **Thesis & Projects:** RAG chatbot, YOLO-based detection and segmentation system, Fake news detector, Speech-to-speech dubbing, Hydrogen forecasting.

Saint Louis University – Baguio City | *B.S. in Chemical Engineering (Magna Cum Laude)* | **2015 – 2020**

- Top 1 Academic Performer, Top 3 Nationwide in Oct 2021 Licensure Exam.

Key Projects (Postfolio - alistermarc.github.io)

RAG Chatbot for Government Ordinances – Built with Django, AWS Textract, Weaviate, OpenAI API. Enables natural language querying of ordinances and resolutions with source-grounded responses.
Multi-Agent System with RAG & BigQuery Agents – Designed a Vertex AI-powered orchestration framework integrating procedural, RAG, and NL-to-SQL agents; streamlined real-time knowledge retrieval.
Hydrogen Consumption Forecasting – Built ML pipeline with ensemble methods, improving refinery hydrogen prediction accuracy by 20%, optimizing efficiency and cost savings.
YOLO-Based Grocery Item Detection – Developed real-time computer vision system with YOLO + Streamlit, enabling robust retail inventory detection and segmentation

Core Skills

ML/AI: Classical Machine Learning, Deep Learning, Natural Language Processing, Computer Vision, Data Engineering
Frameworks & Libraries: Scikit-learn, PyTorch, TensorFlow, Hugging Face, LangChain, Langgraph, NLTK, OpenCV.
Data & Analytics: SQL, dbt, Feature Engineering, Data Pipelines, Visualization (Power BI, Looker, Streamlit, Dash).
Deployment & Cloud: AWS, GCP, Docker, Django, Flask, FastAPI, MLOps.
Other: Statistical Analysis, Model Optimization, Experiment Design, Cross-Functional Collaboration.