Lance Matthew C. Baraña

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Work Experience

Biomerica

California, USA

Senior Data Analyst (Contractual)

January 2025 – June 2025

- Spearheaded end-to-end analytics initiatives, supporting **data-driven decision-making** across the organization by helping design **scalable data pipelines**, implementing advanced statistical models, and delivering actionable insights.
- Designed and managed 12+ executive dashboards in Power BI, leveraging advanced DAX to track different performance indicators (KPIs) and deliver clear, actionable insights to stakeholders.
- Leveraged **Python** for data extraction, transformation, and analysis using libraries such as **pandas**, **NumPy**, and **matplotlib**, converting raw data into actionable insights.
- Designed, managed, and monitored relational databases (**PostgreSQL**), leveraging **Google BigQuery** for scalable cloud-based storage and analytics.
- Worked extensively with large volumes of healthcare-related data, including inventory records, medical claims, and medical equipment data.
- Collaborated with the developers, QA team, and managers to meet business data requirements and reporting needs.
- Performed **Data maintenance**, **Data Validation**, and **Data Quality Assurance** checks periodically to ensure the correctness and accuracy of **large amounts of transaction**, **customer**, and **medical supply data**.

LMCB Trading

Hermosa, Bataan

Business Intelligence Analyst

January 2024 – January 2025

- Performed data analysis on stock inventory and customer purchase data using advanced Excel functions, including Pivot Tables, Sorting & Filtering, complex Functions & Formulas, Data Simulations, and VBA automation.
- Complemented Excel workflows with **Python** scripting for **data cleaning**, **transformation**, and **resource** calculations, improving efficiency and accuracy.
- Analyzed **commercial pricing data** to identify trends, optimize revenue strategies, and deliver data-driven insights that informed **strategic pricing** and decision-making.
- Built and maintained **Data Warehouses** and relational Databases (**MySQL**), implementing **ETL** processes to support business intelligence and data-driven decision-making.
- Created business requirements, project documentation, queries, and reports depending on the business need.
- Worked closely with supply chain, sales, and finance teams to help facilitate the business process with Zapier
- Conducted **financial analysis** by evaluating revenue trends, cost structures, and profitability using advanced Excel and Python models to support strategic decision-making and optimize business performance.

Energin

Sydney, Australia

Jr. Data Analyst (Contractual)

June 2023 – December 2023

- Led and conducted meticulous research, creating an automation system with **Python** and **Microsoft Power Automate** for the R&D Team to automate **MySQL** data querying and manipulation.
- Created **comprehensive functional design documentation** to clearly define **system requirements**, **user workflows**, and **technical specifications**, ensuring stakeholders had a shared understanding throughout each analytics initiative.
- Provided support for User Acceptance Testing, ensuring successful project implementation.
- Designed comprehensive, data-driven visualizations using **Microsoft Power BI** while also tracking business **KPIs**
- Supported the creation of ad-hoc reports such as financial summaries, sales performance, and operational efficiency, to address specific stakeholder needs and business objectives.
- Communicate with cross-functional teams and stakeholders, and analyze and validate **requirements** for **business processes**, **information systems**, and **policies**.

Education

Quantic School of Business and Technology, Masters of Science in Business Analytics. Washington, USA.
Saint Louis University Philippines, Bachelor of Science in Computer Science. Baguio, Philippines.
Regional Science High School III, Graduated with Honors. Subic Bay Freeport Zone, Philippines.

Aug 2025 2019-2023

2013-2019

Freelancing Experience

Freelance Data Engineer

August 2022 – June 2025

- Collaborated with startups and companies to design, implement, and optimize scalable data infrastructure, including data warehouses, data models, relational databases, and ETL/ELT pipelines depending on the business need.
- Built automated data pipelines (Python, SQL) to extract, transform, and load data from APIs, SaaS platforms
- Deployed cloud-based data solutions on AWS (**Redshift**, **Lambda**) and GCP (**BigQuery**) to improve data accessibility and processing efficiency.
- Optimized query performance by indexing, partitioning, and tuning SQL queries in MySQL and BigQuery.

Projects

Power BI Projects

Sample designs of the Power BI Dashboards that I created for various companies across different domains.

- Designed and deployed interactive Power BI dashboards for cross-industry clients and partner companies (healthcare, retail, finance), translating complex data into actionable business insights.
- Developed custom **DAX** formulas (e.g., rolling averages, cohort analysis, market basket metrics) to uncover hidden trends, increasing client ROI visibility by 25%.
- Automated monthly and quarterly financial/operational reporting by configuring Power BI's scheduled refresh functionality and data gateways (SQL databases, Excel, APIs).

Predictive Analysis of the Philippine Stock Market Using Machine Learning and Intermarket Analysis

A side project focused primarily on the predictive analysis of the Philippine Stock Exchange (PSE) using machine learning techniques.

- Developed a predictive model using a **Random Forest Regressor** to analyze the correlation between crude oil prices and the Philippine Stock Market trends, which achieved an accuracy of approximately **79.7%**
- Designed **candlestick graphs** to visually represent stock and crude oil price movements, aiding in trend forecasting.

Ollama-based Langchain ChatBot Application

Developed an AI chatbot using LangChain and Ollama, deployed via Docker with a Streamlit interface

- Engineered an end-to-end chatbot by integrating LangChain's framework for prompt orchestration, Ollama for local LLM inference, and Streamlit for an interactive web interface
- Designed and deployed a multi-container Docker Compose setup, ensuring seamless service orchestration for the backend (FastAPI/Flask), LLM (Ollama), and frontend (Streamlit).
- Conducted performance benchmarking and fine-tuned the LLM for lower latency and higher throughput in local deployments.

Certifications

- Big Data Concentration, <u>Data Modeling & Management Systems</u>, <u>Big Data Integration and Processing</u>, <u>Machine Learning with Big Data</u>, and <u>Graph Analytics</u>, University of California, San Diego.
- Introduction to Machine Learning, Quantic School of Business and Technology
- Microsoft Power BI Data Analyst Professional, Microsoft.
- Google Data Analytics Professional, Google.
- C2 Proficient English Certificate, **EF SET**.
- Data Analytics Essentials, <u>Cisco</u>

Technologies, Tools, & Frameworks

• Technologies: MySQL, PostgreSQL, AWS, Git, Docker, Power BI, Tableau, Big Query, Microsoft Office,

• Tools: Excel, Microsoft Teams, Google Workspace, Jira, Confluence, Salesforce, QuickBooks, Zapier

• Frameworks: Pandas, Numpy, Scikit-Learn, Matplotlib, Streamlit, Langchain, Flask

• Languages: Java, Python, C++, SQL, JavaScript

• SDLC: Waterfall, Agile, Iterative, Scrum