



Francis Mark Cayco

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Full-stack Data Scientist with over 2 years of experience in online marketing and blockchain education. Skilled in deploying explainable ML models, building scalable APIs, handling big data, and orchestrating cloud-based data pipelines for real-time insights.

PROFESSIONAL EXPERIENCE

Bitskwela

Manila, Philippines

Backend Developer (Part Time)

Jul 2023 – Present

- Built a backend API using Django REST Framework for an emerging blockchain developer platform—integrating HTTPS, WebSocket, and webhooks, and lay the groundwork for a solution with potential to revolutionize the industry.

Growthzacks LLC

New Jersey, US

ETL Developer (Freelance)

Sept 2024 – Present

- Automated dashboard workflows in Excel and Power BI and implemented Marketing Mix Modeling (MMM) to boost company productivity by ~300% in certain operations. Also publicly released e-commerce analytics tools—though still maturing—continue to see steady audience growth.

SP Madrid & Associates Law Firm

Parañaque, Philippines

Data Science Intern

Feb 2024 – Apr 2024

- Optimized fragmented analytics pipelines for 3 clients by integrating Polars with Dagster, boosting performance by ~400% and documenting the system for scalable future use.

EDUCATION

Asian Institute of Management

Makati City, Philippines

Master of Science in Data Science

Jun 2024 – Sept 2025

GPA: 4.25

Pamantasan ng Lungsod ng Maynila

Manila, Philippines

Bachelor of Science in Computer Engineering

Oct 2020 – Sept 2024

Summa Cum Laude (GWA: 1.2351)

DATA SCIENCE PROJECTS (GitHub Profile)

SCALE: Integrated Mosquito Detection and Fumigation Utilizing Faster RCNN

- Developed an integrated mosquito detection and fumigation system using Faster Region – Based Convolutional Neural Networks and real-time analytics, enabling targeted mosquito elimination within a 10-meter radius and providing actionable insights for community-based vector control.

Uncovering Air Quality Patterns Through the Lens of Urban Amenities

- Analyzed air quality across 138 Philippine cities by linking pollution data with urban amenities using XGBoost and SHAP, generating counterfactual simulations that shows zoning insights for more sustainable city planning.

OTHERS

Languages: English and Filipino (Professional-level proficiency)

Software / Technical Skills: Python, Pandas, Spark, Torch, Amazon Web Services, Git, PowerBI, MS Office

Professional Development: Data Engineer and Scientist Professional (DataCamp, DataTalks.Club)

Specific Other Relevant Skills or Experiences: Detail-Oriented Execution, Effective Communication, Cross-Functional Collaboration, Analytical Problem Solving, Technical Proficiency