Thomas Danjo M. Manulat

Data Science | Analytics | Business Intelligence | Machine Learning thomasdanjom.manulat@gmail.com | LinkedIn | Cebu City, PH

Highly analytical Computer Science student specializing in Data Science and Machine Learning, with a strong focus on data-driven solutions and reporting. Proven ability to collect, clean, and analyze data to create clear, actionable insights and automate workflows. Skilled in Power BI and Python, with a proactive approach to improving data accuracy and efficiency.

TECHNICAL SKILLS

Data & Business Intelligence: Power BI, SQL, Python (NumPy, Pandas, Matplotlib), Jupyter, PostgreSQL, Firebase, Supabase

AI/ML & Data Science: PyTorch, TensorFlow, Keras, scikit-learn, Docker, Data Pipelines, AI Agent Development

Programming & Frameworks: Python, SQL, JavaScript, C/C++, Java, React.js, Next.js, FastAPI, NestJS, Laravel

PROFESSIONAL EXPERIENCE

Analytics & Full Stack Developer Intern – Ayahay (Startup)

Jul. 2025 - Aug. 2025

- Built Power BI dashboards and a custom analytics portal to track key business financials and revenue trends, directly improving reporting efficiency.
- Integrated AI-driven analytics and forecasting models to boost the accuracy of revenue and expense insights for leadership.
- Optimized database architecture and managed PostgreSQL schemas to improve system scalability and reduce data retrieval time, enhancing data-handling efficiency.

Laravel Developer Intern (DOST)

Jul. 2025 - Aug. 2025

- Engineered and maintained automated reports and dashboards from a MySQL database to track program performance, reducing manual reporting time by 25%.
- Enhanced data visualization and accessibility for program managers, enabling faster, data-informed decision-making.
- Developed and maintained a program management system using the Laravel framework, ensuring a structured and scalable data environment.

Codechum Nov.

Trainee | 2024 – Jan. 2025

■ Trained at Codechum Academy in front-end development and responsive design., focusing on HTML, CSS, and JavaScript.

PROJECTS

Summary: A portfolio of projects demonstrating end-to-end expertise in data pipelines, data visualization, and the application of machine learning for impactful solutions.

MammoScan | Breast Cancer Detection via Thermal Imaging

AI Engineer, Project Manager | Mar. 2025 - Aug. 2025

- Trained and optimized YOLO-based models for thermal breast image analysis, significantly improving early cancer detection reliability.
- Developed a complete solution by establishing a connection between a mobile application and a custom 3D-printed enclosure with a thermal sensor.
- Integrated the AI solution into a React Native + FastAPI pipeline for seamless mobile accessibility.
- Stack: React Native, FastAPI, Roboflow, YOLO.

LE Cell Detection for Systemic Lupus Erythematosus Diagnosis (SLE)

AI Developer & Researcher, Project Manager | Feb. 2025 – Present

- Led the end-to-end data pipeline, from collaborating with research advisers for data labeling to curating and validating datasets using Roboflow.
- Designed and managed automated ML pipelines for preprocessing, model training, and testing, which streamlined the development process and improved reproducibility.
- Stack: Python, PyTorch, Roboflow, NumPy, Pandas, Matplotlib.

PixCell | Microscopic Image Management System

Lead Full Stack Developer & AI Engineer, AI Engineer | Feb. 2025 – Present

- Developed end-to-end AI pipelines for image analysis and seamless deployment into production.
- Achieved 85%+ detection accuracy using YOLOv8 for diverse diagnostic imaging scenarios, validated through data visualizations.
- Automated dataset preparation workflows (cleaning, modeling, annotation, augmentation), improving training efficiency by ~40%.
- Stack: Next.js, FastAPI, SQL, PyTorch, Pandas, PostgreSQL, Jupyter, Roboflow

Sprout - Google Earth Engine Remote Sensing for Filipino Farmers

Data Scientist, Project Manager | 2025

- Built a precision agriculture tool leveraging Google Earth Engine to monitor NDVI, soil moisture, drought, and weather patterns.
- Delivered real-time dashboards to help farmers make informed planting and irrigation decisions.
- Stack: ASP.NET, Next.js, JavaScript, Google Earth Engine CLI

WeiCare - Health Monitoring IoT Solution

AI Developer

- Developed an arrhythmia detection system from smartwatch sensor data (e.g., PPG and ECG signals).
- Experimented with and evaluated various machine learning models, including Random Forest, Support Vector Machines (SVM), and Neural Networks, to determine the optimal model for accuracy and reliability in detecting arrhythmia.
- Improved preprocessing and anomaly detection techniques, which reduced false positives and enhanced the model's performance.
- Stack: Python, scikit-learn, TensorFlow, and Pandas, Huawei Cloud, MindSpore

The Tribune - AI-Powered News Platform

Project Manager & Full Stack Developer | 2025

- Developed a Django-based content management system with AI-driven summarization and interactive features
- Improved reader engagement by 50%, streamlining news delivery and personalization
- Stack: Django

COMPETITIONS, AWARDS, & CERTIFICATIONS

■ Seeds for the Future 2025 – Dongguan & Shenzhen, China | Sep 2025

- Selected as one of the Top 10 nationwide scholars.
- Immersed in training on 5G, Cloud, and AI applications.
- Engaged in Smart City, Digitalization, and Technopreneurship workshops with cross-cultural collaboration.

■ Grand Prize Winner - Scholar's Technopreneurship Training Program 2025

- Grand Prize Winner for MammoScan innovation project.
- Flores & Ofrin Award Free Legal Assistance for Trademark Registration.
- Wildcat Innovation Labs TBI Award 6-month startup incubation program.
- Wadhwani Award Platform access and support via DOST iHub Incubation.

■ Huawei ICT Competition 2025 – Computing Track

- o Grand Prize, National Finals Philippines.
- o First Prize, Regional Finals Kuala Lumpur, Malaysia.
- o Grand Prize, Global Finals Shenzhen, China.
- Showcased technical expertise in openGauss, openEuler, Kunpeng, and Huawei Cloud.

■ Huawei ICT Competition 2024 – Innovation Track

- Grand Prize, National Finals Philippines.
- o Grand Prize, Regional Finals Jakarta, Indonesia.
- o Third Prize, Global Finals Shenzhen, China.
- o Developed solutions leveraging MindSpore and Huawei Cloud.

■ Grand Prize, Codechum National Programming Challenge 2024

 Nationwide competitive programming contest, recognized for problem-solving and algorithmic skills.

■ Pitch Perfect 2024

- University-level pitching competition in partnership with StellarPH, awarded for innovative solution design and presentation.
- CodeChum Java and C Programming
- PhilNITS FE Passer
- TOPCIT Level 3
- Microsoft 365

EDUCATION

Cebu Institute of Technology - University

B.S. in Computer Science

Expected: May 2026

Cebu City, Cebu

■ Honors & Scholarships:

- Consistent Academic / Presidential Scholar, DOST-SEI JLSS Merit Scholar
- o Ranked 1st in B.S. Computer Science, Year 1
- Ranked 4th in B.S. Computer Science, Year 2
- Ranked 1st in B.S. Computer Science, Year 3

■ Leadership:

- News Writer and Editor at The Technologian Student Press (2022-2025)
- Secretary at the Computer Students' Society (2023-2024)
- Microsoft Youth Ambassador at Microsoft (2021-2022)

■ Extracurricular Activities:

- Graduate, Technologian Leader's Academy (2022-2023)
- Member, CIT-U Honor Society (2022-2024)