

Joaquin Sebastian M. Macol

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Education

Polytechnic University of the Philippines

Manila, Philippines

Bachelor of Science in Information Technology

2021-2025

Relevant Coursework: Machine Learning, Information Management, Database Management, Introduction to Data Science

- Magna Cum Laude
- President's Lister (2021 – 2025)

Skills

Technical: Excel, MySQL, Python, MongoDB,

Tools: VSCode, PyCharm, GitHub, JIRA, Microsoft Office Suite, Google Workspace

Strengths: Problem-Solving, Critical Thinking, Collaborative, Willingness to Learn, Detail-oriented, Adaptable

Experience

SMESoft Inc.

Makati, Philippines

Back-end Developer Intern

March – June 2025

- Developed and maintained back-end features, including user authentication, email verification, and CRUD operations to ensure secure and efficient data processing.
- Designed MySQL database schemas, created and maintained multiple tables, and optimized SQL queries to enable efficient system performance and maintain accurate data structures.
- Tested system functions repeatedly to verify end-to-end data flow, analyzed logs, and identified and resolved data inconsistencies, improving overall system reliability and data accuracy.
- Managed data flow between front-end and back-end by contributing to system architecture, ensuring smooth integration and consistent delivery of dynamic data across the web application.
- Implemented data validation rules, error handling procedures, and performance optimizations in PHP modules to enhance data quality, reduce errors, and improve system efficiency.
- Developed responsive UI components from Figma designs using HTML, CSS, JavaScript, and Twig, ensuring accurate and user-friendly display of backend-driven data.
- Collaborated with the team using Agile practices, GitHub version control, and manual QA testing to support accurate feature development and clean data pipelines.

Projects

Coffee Chain Revenue Optimization and Product Performance Tracker (Excel)

- Combined three separate datasets into one main file using XLOOKUP and INDEX MATCH to organize four years of sales records and ensure data accuracy.
- Designed an easy-to-use dashboard with Pivot Tables and Slicers to find the most important customers and top-selling coffee types for management.

Automated Spam Detection using NLP & SVM (Python)

- Developed a high-precision text classification model (Support Vector Machine) to filter unsolicited emails, achieving 99.2% accuracy and a near-perfect 0.999 AUC-ROC score.
- Built an end-to-end NLP pipeline using NLTK to clean and process text data (tokenization, lemmatization, and stopword removal), then applied TF-IDF to convert text into meaningful features for analysis.

School Enrollment System (MySQL & Java)

- Identified key data requirements and designed a normalized MySQL database schema to ensure efficient data storage, accuracy, and optimized querying for the enrollment system.
- Developed a Java-based application integrated with MySQL and applied various SQL queries to retrieve, analyze, and display student and enrollment data, improving data accessibility and decision-making.