

Education

Polytechnic University of the Philippines

Diploma in Computer Engineering Technology - *Specializing in Machine Learning*

Relevant Coursework: Operating Systems, Software Development, Artificial Intelligence

Sta. Mesa, Manila

2023 - Present

Experience

Snapp Ventures Inc.

Alabang, National Capital Region

Software Quality Assurance Intern

March 2026 – May 2026

- Developed Playwright test scripts to automate regression testing and reduce repetitive manual QA.
- Designed SQL schemas across 5 relational tables in Directus and configured automated workflows to support HR leave request submission, approval, and status tracking.
- Validated REST API endpoints using Postman by analyzing API payloads and documenting backend issues.
- Executed end-to-end functional and security testing on Android APK mobile builds and staging sites, capturing multi-modal layout overlaps and securing role-based UI access permissions.

Projects

F1 2026 Winner Prediction System

- Developed a machine learning model that combines historical race data and the current season performance to predict the Formula 1 World Drivers' Champion using Monte Carlo simulation.
- Integrated a dynamic weightage system to account for the drastic 2026 technical regulation changes, shifting model reliance toward electrical powertrain efficiency and active aero adaptability.
- Built an ETL pipeline to ingest and transform telemetry, weather, and race data from the OpenF1 API.
- Designed a PostgreSQL database to store telemetry trends, race results, driver standings, and track-specific performance data for real-time model inference.

Solar-Powered Monitoring System (*Thesis Project | Full-Stack Dev*)

- Developed a real-time battery monitoring dashboard for a solar-powered smart bench, displaying battery level, voltage, current, and remaining capacity with 5 second updates from the ESP 32.
- Implemented historical battery analytics with rolling trends, daily min-max summaries, and battery metrics.
- Implemented role-based access, CSV export, and weekly/monthly battery reports for system performance.

Budget Tracker Website

- Developed a full-stack budget tracker with AI receipt scanning, recurring expenses, and real-time budgeting.
- Implemented AI receipt scanning to extract up to 50 receipt items and automatically categorize expenses.
- Built a spending analytics with 90-day anomaly detection, AI budget insights, and exportable financial reports.
- Implemented role-based authentication, with email verification, CSRF protection, and rate limiting.

Technical Skills

Frontend Development: HTML, Tailwind CSS, JavaScript, React

Backend & Database: Python, Java, NumPy, Pandas, PostgreSQL, Flask, FastAPI

Automation & Testing: Playwright, Maestro, Postman, Regression Testing

Tools: Git, GitHub, Docker

Certifications

Computer Systems Servicing NC II

TESDA | September 2024

Introduction to Python Programming

Coursera | November 2025

Mechatronics Servicing NC II

TESDA | February 2026

Python Data Associate

DataCamp | February 2026