Emmanuel Delacruz Malagamba

Full-Stack Software Developer

Education

STI-College General Santos

Sept 2021 - June 2025

Bachelor of Science in Computer Science

Tertiary

1.81 Cumulative GWA (3.0 / 4.0 GPA)

Coursework: Data Structures & Algorithms, Software Engineering 1 & 2, Software Quality Assurance, Artificial Intelligence, Application Development and Emerging Technologies, Mobile Programming

Notre-Dame Siena College of General Santos

June 2019 - April 2021

Science, Technology, Engineering, and Mathematics (STEM)

Senior High School

Experience

Kave Guild June 2025 - July 2025

Freelance Full-Stack Developer

- Improved **UI responsiveness** across tablet and mobile devices (L, M, S breakpoints), ensuring seamless user experience on multiple form factors.
- Refactored and modularized existing code, improving **maintainability and scalability** for future development.
- Collaborated with the lead developer on code reviews, aligning enhancements with best practices.

Kave Guild January 2025 - May 2025

Full-Stack Developer Intern

- Developed frontend components for POS modules (Sales, Products, Transactions, Shifts), including tables, counters, and product management features.
- Initialized and structured the backend using **MVC architecture** (Express, MongoDB), establishing a scalable foundation for future development.
- Contributed to a 4-member Agile Scrum team, participating in sprint planning, code reviews, and daily stand-ups to deliver features on schedule.

STI-College General Santos

January 2024 - November 2024

Researcher & Full-Stack Developer

- Empowered farmers through a cross-platform app for pest identification and yield forecasting using *CNN* **TensorFlow/Keras** and **OpenCV**.
- Achieved 96.5% accuracy in pest classification using custom-trained machine learning model.
- Ensured iterative progress and risk mitigation by applying the *Agile Spiral model*.

STI-College General Santos : Code Fest (1st Runner-Up)

March 2024

Front-End Developer

- Led front-end development in 6-hour coding challenge with 3-person team
- Developed Java-based hotel reservation mobile application
- Demonstrated rapid prototyping and teamwork skills under pressure

Projects & Contributions

Kave Guild Pharmacy

POS System with Integrated Inventory

- https://kavepharmacy.netlify.app
- Contributed to the development of a full-stack POS system supporting daily sales and inventory operations, building core frontend and backend features.
- Built CRUD functionality for product management, enabling accurate stock tracking and smoother sales workflows.
- Collaborated in a 4-member **Agile Scrum** team, delivering frontend (React) and backend (Node.js, MongoDB) features through daily stand-ups and sprint-based development.

MongoDB, React, Vite, Express, Mongoose, Nodejs

Harvest Assistant: A Smart Pest Management and Enhanced Grain Production

Integrated web admin, mobile app, and CNN model to address challenges in local grain agriculture.

- https://github.com/Amenyuwel/Harvest-Frontend
- Built mobile platform for farmers with pest image classification using TensorFlow/Keras, trained and deployed custom ML model achieving *96.5%* classification accuracy.
- Designed features for gross income estimation, seasonal pest activity, and yield forecasting.
- Conducted alpha and beta tests with farmers; achieved strong adoption for pest classification and harvest planning.

React, Nextjs, React Native Expo, Express, MongoDB, Mongoose, Python, Flask

Appliance Shop E-Commerce

A comprehensive back-office system for inventory, analytics, forecasting, and Point of Sale (POS).

- https://github.com/VKx64/DK-Admin
- Integrated sales forecasting using **Facebook Prophet** and displayed results through interactive front-end visualizations.
- Built interactive analytics dashboard displaying sales trends and customer insights
- Built RESTful API with complete CRUD operations and secure authentication, enabling seamless and reliable data flow between front-end and back-end.

Python, Forecasting, Flask, RESTful API

Skills

Programming Languages: JavaScript & Python

Frontend: TailwindCSS, HTML, CSS, React (NextJS & Vite)

Backend: Node.js, JWT, Bcrypt, Express, Flask

Database: MongoDB, Sqlite3, and MySql

Mobile: React Native Expo, Expo Go

AI/ML: TensorFlow, Keras, OpenCV, Prophet, Kaggle

Other: Git, Github, Agile/Scrum, Spiral