Emmanuel Delacruz Malagamba

Full-Stack Software Developer

Education

STI-College General Santos

Sept 2021 - June 2025 Bachelor of Science in Computer Science

1.75 GWA (3.5 / 4.0 GPA)

Tertiary

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

Science, Technology, Engineering, and Mathematics (STEM)

June 2019 - April 2021 Senior High School

Experience

June 2025 - July 2025 Kave Guild

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 Researcher & Full-Stack Developer

January 2024 - November 2024

- 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) Front-End Developer

March 2024

- 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

Designed features for gross income estimation, seasonal pest activity, and yield forecasting.

- Built mobile platform for farmers with pest image classification using TensorFlow/Keras, trained and deployed custom ML model achieving *96.5%* classification accuracy.
- 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

AI-Refine

Web-based image augmentation tool for dataset refinement for CNN Models.

https://github.com/Amenyuwel/Ai-Refine Built responsive web application using Next.js and PocketBase for CNN model training enhancement

- Implemented drag-and-drop functionality with real-time image processing (flip, grayscale, blur, brightness)
- Enhanced CNN model training by developing a dataset refinement tool with image augmentation features (flip, blur,
- grayscale, brightness).

React, Nextjs, PocketBase

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 RESTful API with complete CRUD operations and secure authentication, enabling seamless and reliable data flow between front-end and back-end.

Built interactive analytics dashboard displaying sales trends and customer insights

Python, Forecasting, Flask, RESTful API

Thesis Library Portal STI-College General Santos' web-based portal for managing and accessing digital thesis collections.

https://github.com/Kristoferseyan/thesis_lib • Enhanced UI performance and responsiveness across multiple device formats

Refactored architecture, reducing file complexity and improving maintainability

Skills

React, Nextjs, Responsiveness, TailwindCSS

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