WINCE LARCEN M. RIVANO

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SUMMARY

I am a fourth-year BS Computer Science student at Mapúa Malayan Colleges Laguna with strong experience in Machine Learning & AI, full-stack development, and UI/UX design. I have built and deployed end-to-end applications across web and mobile platforms, leveraging AI, applying expertise in deep learning, data science, and system design. I am also active in student organizations such as Mapúa MCL ACM-Student Chapter and JPCS Mapúa MCL, and I regularly participate in hackathons and competitions, showcasing innovation, teamwork, and problem-solving in real-world challenges.

EDUCATION

Bachelor of Science in Computer Science (Specialization in Machine Learning) — **Aug 2022 - Present**

Mapúa Malayan Colleges Laguna

- President's Lister and Dean's Lister throughout my current stay at Mapúa Malayan Colleges Laguna (Running GWA of 1.162)
- Full Academic Scholarship Recipient since 2022

EXPERIENCE

UI/UX Designer Intern at Codebility — **June 2025 - Aug 2025**

Voluntary Internship

- Designed the wireframes, mockups, and design system for Memora, a photo server sharing app focused on simplicity and collaboration.
- Led the end-to-end UI/UX design for Eloura, a mobile e-commerce app emphasizing seamless navigation and product discovery.
- Reduced usability issues by 20% through conducting quick user testing sessions and refining interfaces based on real-time feedback.

Freelance Software Developer — **December 2024 - February 2025**

Freelance

- Secured and completed 8 client projects by sourcing and engaging leads through online platforms, primarily Facebook.
- Delivered a range of custom software solutions, from small-scale coding assignments to full-stack web systems, meeting client specifications and deadlines.
- Increased client satisfaction and project turnaround efficiency by tailoring development workflows to individual project scopes and technical requirements.

Software Engineering Fellow at Headstarter — **July 2024 - September 2024**

Remote Fellowship

- Created EduBot, an AI-powered chatbot that assists students in coding, grammar, research, and plagiarism detection, as part of the fellowship's capstone project series.
- Developed 5 AI-integrated web applications by combining modern web frameworks with machine learning and natural language processing tools.
- Collaborated in team-based hackathons, delivering innovative prototypes under tight deadlines and improving cross-functional teamwork skills.

SKILLS

Artificial Intelligence, Machine Learning & Data Science

- Developed and optimized classical machine learning models for classification, regression, and clustering, achieving high accuracy in predictive analytics and decision-support systems.
- Designed and trained custom neural networks (MLPs, CNNs) for object detection, facial recognition, and medical image analysis using PyTorch, TensorFlow, OpenCV, and YOLO.
- Fine-tuned transformer models such as DeBERTa and MiniLM for sentiment analysis, emotion detection, and text classification, deploying them via Render and integrating into production-grade web applications.
- Proficient in the Python Data Science ecosystem, including pandas, NumPy, matplotlib, and seaborn, for data wrangling, exploratory data analysis (EDA), and model pipeline development.
- Enhanced model reliability through meticulous data preprocessing, cleaning, and feature engineering, ensuring robust and high-quality inputs.

- Created interactive dashboards and visualizations to communicate data-driven insights to both technical and non-technical stakeholders.
- Applied statistical techniques such as regression, hypothesis testing, A/B testing, and performance evaluation metrics to validate model results and guide data-driven decisions.
- Integrated Large Language Model (LLM) APIs including OpenAI, Groq, and NVIDIA LLaMA into web and mobile platforms, improving user engagement and automating content workflows by up to 40%.

UI/UX Design

- Designed and prototyped responsive user interfaces for mobile and web applications across various domains, including e-commerce, shuttle booking, and business management, enhancing usability and engagement.
- Applied user-centered design principles to ensure intuitive navigation, accessibility compliance, and cohesive visual identity across all digital products.
- Conducted usability testing and implemented rapid design iterations, improving task completion time and visual consistency by over 25% based on user feedback.

Full-stack Web and Mobile Development

- Developed and deployed scalable, responsive web applications using React, Next.js, and ASP.NET WebForms, improving performance and user experience across devices.
- Built and maintained mobile applications with React Native, Kotlin, and C# Xamarin, ensuring cross-platform compatibility and reliable performance on Android environments.
- Implemented modern UI frameworks such as Tailwind CSS, Material UI, DaisyUI, and Bootstrap to design accessible, consistent, and visually appealing interfaces.
- Collaborated across the full development stack — from database design and RESTful API integration to frontend optimization — ensuring maintainability and scalability of deployed systems.

Project Management & Leadership

- Led and coordinated multidisciplinary teams through the planning, analysis, design, and implementation phases of multiple software development projects, ensuring on-time and high-quality delivery.
- Competed in national programming competitions and hackathons including Byte Forward Hackathon, DLSU HackerCup, and CodeChum National Programming Challenge, successfully managing high-pressure deadlines and technical presentations.
- Organized and facilitated programming workshops and mentored Computer Science students under the Mapúa MCL-ACM Student Chapter, fostering collaboration and technical growth within the academic community.

FEATURED PROJECTS

NeuroView https://neuroview-brainscans.vercel.app/ https://github.com/wncelrcn/NeuroView https://colab.research.google.com/drive/1fAmR5DdCRzRIyuF3Dhkk8w8I5_1VLj2s Aug 2025

- Achieved 93.5% classification accuracy across four brain tumor types (Glioma, Meningioma, Pituitary, No Tumor) by developing a custom Multilayer Perceptron (MLP) trained from scratch on MRI scan datasets.
- Built a cross-platform application — a Next.js + Tailwind + Supabase web app and a Kotlin + Jetpack Compose mobile app — to make diagnostic predictions easily accessible to both clinicians and students.
- Deployed and maintained the project via Vercel, ensuring reproducibility and public accessibility.

MindMap https://mindmap-journals.vercel.app/ https://github.com/wncelrcn/MindMap https://huggingface.co/wncelrcn/mindmap-MiniLM-goemotions-v1 July 2025

- Engaged 30 beta testers in a school-wide pilot to validate usability and emotional accuracy, achieving positive feedback on engagement and ease of use.
- Built a comprehensive mental health journaling platform that transforms traditional journaling into an AI-powered experience, helping users track emotions, gain insights, and build healthier wellness habits through guided reflection and gamification.
- Improved real-time emotion detection accuracy by fine-tuning a custom MiniLM model on the Google GoEmotions dataset for sentiment classification.
- Developed and deployed the system using Next.js, Material UI, NVIDIA LLaMA 3.1, and Supabase, hosted on Vercel and Render for scalable and reliable access.

Breast Cancer Prediction and Diagnosis https://drive.google.com/file/d/1TAI-I2Be56vEgABKIlq6hgHxP9ZyDMJN/view?usp=sharing March 2025

- Achieved a best F1-score of 0.9912 using Support Vector Machine (SVM) on a full feature set, outperforming Logistic Regression, KNN, and Random Forest in early-stage breast cancer detection.
- Conducted comparative evaluation across multiple feature sets (full, reduced, top-10) using metrics such as accuracy, precision, recall, F1-score, and AUC-ROC, ensuring robust assessment.
- Documented findings in a formal research paper, contributing to early diagnostic modeling literature for breast cancer detection.

Wizzy https://wizzyflashcards.vercel.app/ https://github.com/wncelrcn/Wizzy — January 2025

- Improved study efficiency for 5 student users by developing an AI-powered flashcard generator that instantly creates personalized study materials from user prompts.
- Designed an intuitive and engaging interface to streamline study workflows, making the learning experience more interactive and tailored to individual needs.
- Built with Next.js, Material UI, Groq AI, and Firebase, and deployed via Vercel for fast, scalable, and accessible performance.

Presenza https://github.com/wncelrcn/Presenza-Face-Recognition — November 2024

- Automated attendance tracking for event organizers by developing an AI-powered facial recognition system using OpenCV and the face_recognition module.
- Enhanced check-in efficiency with a 15-minute real-time recognition window, enabling automated verification of on-time, late, or absent participants.
- Improved record management accuracy by enabling PDF and Excel report exports, giving organizers clear attendance insights and accountability.
- Built a scalable and secure web platform using Next.js, DaisyUI, Firebase, and OpenCV, ensuring smooth performance and reliable data handling.

EcoTrack https://github.com/wncelrcn/EcoTrack — November 2024

- Encouraged sustainable digital habits by developing a React Native mobile app that monitors phone usage and visualizes its environmental impact.
- Increased user engagement through gamified habit tracking, awarding points for reducing screen time, maintaining a low carbon footprint, and meeting personal goals.
- Boosted long-term participation with a weekly leaderboard and rewards system, issuing certificates and digital badges to top-performing users.
- Built with React Native, Expo, and Firebase for cross-platform compatibility, real-time data tracking, and scalable user management.

ClassMate https://github.com/wncelrcn/ClassMate — June 2024

- Improved student productivity and time management by developing a mobile app that helps users organize classes, track assignments, and manage study schedules.
- Reduced missed deadlines by providing a centralized task management system tailored for academic use, helping students stay organized and on track.
- Built with Android Xamarin and integrated with a MySQL database via RESTful APIs (PHP) to ensure secure data synchronization and reliable performance.

AFFILIATIONS

Mapúa MCL ACM Student Chapter

- Research & Development Committee Member – supported research projects and technical initiatives, helped organize departmental programming competitions, and represented the school in intercollegiate programming contests.
- Mentor – led a Web Development Workshop (Feb 2025) for Grade 12 students, teaching HTML, CSS, JavaScript, and guiding them in building portfolio websites.

Junior Philippine Computer Society - Mapúa MCL

- Second Year Representative (A.Y. 2023–2024) – served as liaison between JPCS and the 2nd year student body, managing communications and student support.
- Co-led the 1st AI Summit at Mapúa MCL (June 2024), facilitating an event that introduced students to artificial intelligence applications and trends.

CERTIFICATIONS

NVIDIA Fundamentals of Deep Learning
NVIDIA

Python Data Fundamentals
DataCamp

Google Cloud Computing Foundations: Cloud Computing Fundamentals
Google Cloud Skills Boost

COMPETITIONS & AWARDS

Byte Forward Hackathon National Finals - Top 6
October 2025

Byte Forward Hackathon South Luzon Leg - Champion
September 2025

UPLB Warframes: Web Design Competition 2025 - 3rd Placer
March 2025

CodeChum National Programming Challenge Group Stage 3 Finals - 5th Placer
December 2024

Mapúa MCL President's Lister and Dean's Lister
A.Y 2022 - 2023, A.Y. 2023 - 2024, A.Y. 2024 - 2025