Lanz Joseph Tarrosa Villanueva

Computer Engineer

CONTACT

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🌐 **Portfolio:** mooyi.pages.dev | **GitHub:** github.com/Mooyi07

EDUCATION

B.S. in Computer Engineering

Technological University of the Philippines Visayas | *2021–2025*

- Vice-President External ICpEP SE TUPV (2021 – 2024)
- Top 3 Regional Programming Competition Java Category (2022 – 2024)

Senior High School (STEM Strand)

University of St. La Salle | *Graduated 2021*

- Achievement Honor Awardee

THESIS

FullStack Developer (PHP, MySQL, FlaskAPI, Bootstrap)

Development of IoT Based Energy Management System with Predictive Analytics | 2025

- Comprehensive IoT Integration: The system effectively combines sensors (SCT013, DHT11, PIR) with Arduino UNO and NodeMCU to gather real-time data on power usage, temperature, humidity, and occupancy, providing a complete view of environmental and energy conditions.
- Smart Data Processing and Visualization: Using a web-based dashboard built with HTML, CSS, JavaScript, PHP, and MySQL, users can monitor real-time data, analyze trends, and view AI-generated energy consumption forecasts using FlaskAPI, making the system both functional and user-friendly.

PROFESSIONAL EXPERIENCE

Systems Lead Support & Cybersecurity Intern

Department of Information and Communications Technology – Negros Occidental | 2025

- Optimized the B.R.A.M.S. system using PHP, JavaScript, and Firebase by identifying and fixing recurring bugs, improving system stability and reducing downtime by 30%.
- Provided technical support during cybersecurity workshops on "Ethics in Cybersecurity" for 200+ participants, promoting the adoption of best practices and strengthening overall data protection.
- Implemented real-time monitoring procedures that reduced incident response time by 20%, significantly enhancing operational efficiency and system reliability.

Computer Laboratory Technician Intern

Lasaltech Inc. | 2024

- Diagnosed and repaired over 50+ hardware and software issues, including system reformatting, RAM upgrades, and peripheral functionality tests, reducing computer lab downtime by 25%.
- Configured and optimized Windows 10 systems for reliable lab performance.
- Streamlined maintenance by documenting issues and analyzing system performance through the bootstrap loader, improving repair speed and overall lab efficiency.

WordPress Designer & Developer Intern

Crave Technology / Green Module Systems | 2022

- Developed and launched the Conveyance Bot website using WordPress Elementor, boosting client web traffic by 20% within the first month.
- Customized site layouts and integrated client feedback, reducing delivery timelines by 15%.
- Applied SEO best practices to improve search visibility, resulting in higher engagement and user retention

Assistant Technical & Production Director

Google Developer Group – Bacolod | 2022

- Directed technical operations for Google I/O Extended and Google DevFest events with 500+ attendees, ensuring zero downtime during live sessions.
- Engineered hybrid event setups (AV systems, livestreams, tech runs) that reduced setup errors by 40% compared to prior years.
- Coordinated with speakers and volunteers to deliver a seamless participant experience across multiple event platforms.

Campus & Summit Director

Developers Connect Bacolod | Present
- Organized and scaled developer summits across 10+ universities, engaging over 300 student developers in coding, web development, and collaboration.
- Fostered partnerships between academia and tech organizations to grow regional developer communities.
- Promoted best practices in programming and software development, enhancing technical competency among participants.

PROJECTS

Graduation Dinner RSVP Web App
Built and hosted a responsive event confirmation website using Firebase, HTML, and CSS, featuring real-time RSVP sync, countdown timer, photo slideshow, and guest search, successfully used by 100+ attendees.

E-Certificate Generator Web App
Designed a bulk certificate automation tool using JavaScript and HTML/CSS to generate and send certificates, reducing manual processing time by 90%.

QR Attendance Tracking System
Developed a web-based attendance tracker using JavaScript, Firebase, and QR code scanning with Excel export (timestamp, LRN, name), improving accuracy and reducing errors in student attendance logging.

CERTIFICATES

- **Introduction to Cybersecurity Fundamentals by Coursera** – December, 2024
- **Introduction to Generative AI by Coursera** – December, 2024
- **Java (Basic) by HackerRank** – April, 2025
- **Python (Basic) by HackerRank** – April, 2025
- **Problem Solving (Intermediate) by HackerRank** – May, 2025
- **SQL (Intermediate) by HackerRank** – October, 2025

SKILLS

PROGRAMMING
- Java
- Python
- C++
- C Programming

AI / MACHINE LEARNING
- TensorFlow
- Pandas
- Keras
- NumPy

WEB & APP DEVELOPMENT
- HTML
- CSS
- Sass
- PHP
- AJAX
- WordPress Elementor
- Xampp
- Javascript

DATABASE
- Firebase
- SupaBase
- MariaDB
- MySQL

TOOLS & DESIGN
- Git
- Mathlab
- Arduino
- Figma
- Photoshop
- Canva

FRAMEWORKS
- Bootstrap
- Flask
- ReactJS
- ExpressJs
- NextJs
- NodeJs
- Tailwind
- JQuery
- VanillaJs