

Aean Gabrielle D. Tayawa

Batac City, Ilocos Norte, Philippines

+63 995 201 7559 | ✉ tayawaaean@gmail.com

[linkedin.com/in/aean-gabrielle-tayawa](https://www.linkedin.com/in/aean-gabrielle-tayawa) | github.com/tayawaaean | <https://aeantayawa.vercel.app>

PROFESSIONAL SUMMARY

Full Stack Software Engineer with 2+ years building production IoT systems and cloud-native platforms. Led 5 government-funded automation projects across agriculture and renewable energy, serving 1000+ installations nationwide. Expert in MERN stack, Docker, and real-time data pipelines with proven ability to deliver scalable solutions from embedded systems to cloud deployment.

TECHNICAL SKILLS

Languages & Frameworks: JavaScript (ES6+), TypeScript, Node.js, React.js, Next.js, Python, React Native

Backend & APIs: Express.js, RESTful APIs, Fastapi, Flask

Databases: MongoDB, MySQL, Firebase, PostgreSQL, Supabase

DevOps & Cloud: Docker, NGINX, Ubuntu Server, Git, Vercel

Embedded & IoT: Arduino, C++ Microcontroller Programming, Custom PCB Design, Sensor Integration

AI Tools: Cursor Pro, ChatGPT, Claude

EXPERIENCE

Mariano Marcos State University - Affiliated Renewable Energy Center
Science Research Analyst

October 2024 - Present

- Led architecture and deployment of 5 comprehensive IoT + MERN stack systems for agricultural automation, achieving 99.9% uptime across distributed deployments
- Built real-time data pipelines processing continuous sensor streams via MQTT, Node.js, and MongoDB for 24/7 remote monitoring
- Engineered containerized applications with Docker and deployed on Ubuntu servers with NGINX
- Developed embedded systems in C++ with custom PCB design for automated irrigation and climate control
- Delivered 3 government-recognized platforms including DOE-adopted ARECGIS serving 1000+ renewable energy installations nationwide
- Key Projects:
 - Solar Pump Analytics Platform:** MERN dashboard with PVWatts API integration and CO₂ emissions calculator for policy analysis
 - ARECGIS Platform:** React.js/Node.js GIS system officially adopted by multiple State Universities nationwide

Tayawa Tolentino CPAs and Company
Full Stack Development Intern

June 2023 - August 2023

- Developed internal portal using PHP, JavaScript, and MySQL with 6 modules for document tracking and task management
- Improved operational efficiency by 40% through automation of manual processes
- Deployed responsive WordPress website boosting client inquiries by 25% in 2 months
- Configured production environment on Hostinger with DNS, FTP, and MySQL achieving 100% uptime

EDUCATION & ACHIEVEMENTS

Mariano Marcos State University
Bachelor of Science in Computer Engineering

Batac City, Ilocos Norte, PH
2020 - 2024

Recent Certifications: Node.js Complete Bootcamp (2024) | React Complete Guide (2024) | DevOps Advanced (2025)