KENNETH B. DEL MUNDO

BS INFORMATION TECHNOLOGY - NETWORK TECHNOLOGY

Malvar Batangas Philippines │ kdelmundo51@gmail.com │ 09491596620

SUMMARY

Versatile Developer with hands-on experience from academic projects, freelancing, and OJT, combining software expertise with IoT hardware development. Recognized for strong problem-solving skills, effective communication, and a collaborative mindset. Dedicated to delivering innovative solutions and eager to grow while contributing value to the team.

PROFESSIONAL EXPERIENCE

IT Specialist(Intern), Arktech Philippines Inc.   **February 2025 - May 2025**

- Developed a real-time monitoring system integrating software (PHP, Python) and hardware (IoT using C++) to continuously track machine operating conditions.
- Integrated sensors and modules into company machines to detect operational status and generate data for analysis.
- Built a Python-based alert system that detected machine alarms and automatically retrieved CCTV footage from 5 minutes prior to the event, enabling workers to quickly identify root causes.
- Improved operational efficiency and troubleshooting speed by providing management with a live dashboard to monitor machine health.

Guest Lecturer (Part-Time)   **August 2025 - Present**

- College guest lecturer at Batangas State University - The National Engineering University, teaching Python programming and IoT development to undergraduate students.
- Designed and delivered engaging lectures, live coding sessions, and hands-on demonstrations to strengthen students' technical and problem-solving skills.
- Recognized for clear communication and ability to simplify complex technical concepts.

Freelance Developer   **May 2025 - Present**

- Delivered customized IoT-based software and hardware solutions for clients, from prototyping to deployment.
- Designed and implemented web and mobile applications integrated with IoT devices for real-world use cases.
- Collaborated directly with clients, demonstrating strong project management, adaptability, and client-focused communication skills.

EDUCATION

Bachelor of Science in Information Technology major in Network Technology   **2021- 2025**

Batangas State University - The National Engineering
University - JPLPC Malvar Campus

Information Communication Technology (ICT) Strand - Technical Vocational Livelihood (TVL) Track   **2019-2021**

Malvar Senior High School

SKILLS

Good Communication	Problem Solver	Critical Thinking
Leadership	Time Management	

TECHNICAL SKILLS

- **Programming:** Python, C++(for IoT integration), JavaScript, PHP, Dart (Flutter)
- **Web Development:** HTML, CSS, Bootstrap,
- **IoT & Embedded Systems:** Arduino, ESP32, Sensor Integration
- **Databases:** MySQL, RTDB(Firebase)
- **Tools & Platforms:** Git/GitHub, VS Code, Firebase, Linux
- **Networking:** LAN/WAN configuration, Cisco Packet Tracer

PROJECTS

IoT Enabled Rainwater Harvesting and Recycling System

Position: Project Leader and Manager, Full Stack Developer(Hardware and Software)
Language: C++, Flutter(Dart)   **Database:** SQL

- Designed and implemented an automated rainwater harvesting system that classifies rainwater into potable and non-potable categories using multiple IoT sensors and modules programmed in C++.
- Integrated IoT hardware with a mobile application (Flutter/Dart) to provide real-time monitoring of key water quality parameters.
- Enabled data logging and visualization by storing sensor readings in a local SQL database, allowing users to track water quality history.
- Improved water utilization efficiency and supported sustainable resource management through smart IoT automation.

Brgy. Help Center (Web Application)

Position: Project Manager, Backend Developer
Language: JavaScript   **Web Technologies:** HTML, CSS   **Database:** SQL

- In-charge of all aspects of development, from coordinating with the client to gathering requirements, designing the user interface, overseeing development, and ensuring timely delivery. I facilitated clear communication between stakeholders, ensuring the website met the community's needs and was fully functional.

Spotify Clone (Mobile Application)

Position: Project Leader, Front End Developer
Language: Dart   **UI Framework:** Flutter

- A simple Spotify UI clone built using Dart and Flutter, replicating the look and feel of the Spotify app. The app focuses on mimicking the interface with features like a home screen, music library, playlists, and navigation controls.

DM's Farm (Web Application)

Position: Project Leader and Manager, Developer
Language: JavaScript   **Web Technologies:** HTML, CSS, Bootstrap   **Markup/DataFormats:** XML

- In-charge of all aspects of development, from coordinating with the client to gathering requirements, designing the user interface, overseeing development, and ensuring timely delivery. I facilitated clear communication between stakeholders, ensuring the website met the community's needs and was fully functional.

Alarm Recording Footage Retrieval
Position: Project Member, Developer
Language: Python   **Database:** SQL

- Developed a system integrated with an IoT device that, upon detecting an alarm signal from a machine, it automatically retrieves CCTV footage starting five minutes prior to the alarm trigger for incident review and analysis.

Machine Monitoring and Alert System (IoT-Based)
Position: Project Member, Hardware Developer
Language: C++(Arduino code), JS   **Web Technology:** HTML, CSS, Bootstrap   **Database:** SQL

- Developed an IoT-powered hardware system to detect and classify machine states (Running, Idle, Not Running, and Alarm).
- Designed firmware in C++ to collect real-time machine status through sensors and modules.
- Built a web application (PHP/Python) to display machine conditions and provide a visual dashboard for operators.
- Improved efficiency by enabling workers to monitor machine performance and quickly respond to alarms.

SmartRide Guardian: IoT-Based Motorcycle Safety System
Position: Project Member, Software and Hardware Developer
Language: Dart   **UI Framework:** Flutter   **Database:** Firebase   **API:** Google API

- Designed and developed an IoT-enabled smart helmet system to enhance rider safety and accident prevention.
- Integrated ultrasonic sensors to detect obstacles and trigger real-time alerts through a connected mobile application.
- Utilized a GPS module to monitor the rider's location, speed, and route classification (e.g., national road, barangay road, highway).
- Implemented an intelligent speed limit monitoring feature that adapts based on the detected road type.
- Combined hardware and software integration for real-time data collection, processing, and user notifications.

ACHIEVEMENTS

Batangas IT Conference - IoT Research Competition
1st Place (Champion) - April 2025

NRCITE - National Research Conference on Information Technology Education 2025
Best Presenter - May 2025

Empowering ALS and Grade 12 Students Through IoT and Robotics Workshop Training
Trainer - December 2024

Responsible Conduct of Research 2024 Training
Certificate of Completion - November 2024