




SHEMUEL RIO M. ANDRES

Computer Engineer

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 codereeyo.github.io

ABOUT ME

A Computer Engineer with experience in building embedded systems using Arduino, developing responsive frontend websites, and providing technical support.

SKILLS

- **Software & Web:** CMS Builders (WordPress), HTML, CSS, JavaScript, SQL, C++, cPanel, FileZilla
- **IT & Office Tools:** Microsoft Office Suite, Google Workspace, Figma, Canva, Git
- **Technical Knowledge:** Basic networking, troubleshooting OS/software issues, remote desktop tools, troubleshooting hardware/software, SEO optimization
- **Other Skills:** Basic audio/video/photo editing, problem-solving, customer support, documentation

EXPERIENCE

October 2023 - March 2025

Project-Based

WordPress Developer

- Collaborated with the head developer to deliver a client-ready website, providing both technical solutions and support during development.
- Built a website from scratch using Elementor/Pro, ensuring smooth functionality and troubleshooting plugin or theme conflicts.
- Integrated plugins and optimized backend performance for an e-commerce site, improving site speed and reliability.
- Converted Figma designs into responsive websites and verified cross-device compatibility.
- Applied SEO best practices to enhance website visibility and user experience.
- Managed site server, files, database, and domain, ensuring proper setup and issue resolution.

October 2023 - June 2024

Freelance - Online

Junior SEO Specialist

- Supported clients in optimizing their websites for better visibility and functionality.
- Identified relevant keywords and improved website elements (tags, meta descriptions, headers, images) to resolve ranking issues.
- Troubleshoot mobile-responsiveness problems, ensuring usability across devices.
- Provided clear guidance and recommendations to clients, strengthening communication and support skills.
- Implemented interlinking strategies to improve site navigation and performance.

July 2022 - August 2022

On-the-job Training

Assistant Developer (On-The-Job-Training)

- Worked with a peer developer to create a mobile application (TSMFII) for digitalizing manufacturing instructions, reducing reliance on paper.
- Contributed to the user interface design and troubleshooting of application functionality.
- Utilized Unity 3D for development, creating and adjusting sprites to resolve visual or performance issues.
- Presented mockups and final outputs to a panel, demonstrating communication and problem-solving skills in a team setting.

ARDUINO PROJECTS

Gas Detection System with Arduino Nano

- Designed and built a gas monitoring system using an MQ sensor with a configurable threshold set by a potentiometer.
- Implemented warning indicators: red LED and buzzer triggered when threshold was exceeded; green LED blinked to show system power.
- Used an I2C OLED display to show real-time gas concentration, threshold level, and alarm status.
- Integrated a manual reset button for alarm shutdown, improving user control and safety.
- Strengthened skills in sensor integration, embedded display interfaces, and real-time embedded systems.

Smart Dog Feeder with ESP8266 and DS3231 RTC Module

- Developed a Wi-Fi-enabled automated dog feeder using an ESP8266 microcontroller.
- Integrated a DS3231 Real-Time Clock (RTC) module to schedule feeding times accurately.
- Used a relay module to control power to the servo motor that dispenses food.
- Programmed feeding logic to activate the servo at set times and ensure consistent portioning.
- Enabled manual and automatic control, showcasing real-time embedded programming, time based automation, and actuator control.

Automerica – Automatic Turmeric Juicer and Pulverizer (Thesis Project, 2023)

- Designed and developed an Arduino Mega-powered system to automate turmeric processing.
- Programmed the microcontroller to control motors, relays, and processing steps.
- Handled circuit wiring, component integration, and real-world testing of automation sequences.
- Reduced manual labor by automating repetitive steps through embedded logic.

CERTIFICATIONS & ACHIEVEMENTS

- Electronics Product Assembly and Servicing NC II (TESDA)
- Civil Service Exam – Professional Level Passer

LANGUAGES

- Filipino (Native)
- English (Fluent)

REFERENCES

Angelica Marcelino

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