# ENGR. JUMILAN L. DELA PEÑA, ECT

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## Objective

As a Licensed Electronics Engineer and Licensed Electronics Technician with professional certifications in Full Stack Software Development, Project Management, Data Analytics, and Digital Marketing and E-commerce, I am eager to advance my career by applying my diverse technical expertise and problem-solving skills to innovative, real-world challenges. I seek a dynamic role where I can leverage my engineering foundation and multidisciplinary certifications to contribute to impactful projects, drive technological solutions, and foster organizational growth.

## Education

**Google**
*2025*
AI Prompting Essentials Specialization
97.92

**IBM**
*2025*
Full-Stack Development
92.27

**Google**
*2025*
Digital Marketing and E-commerce
89.8

**Google**
*2024*
Data Analytics
93.96

**Google**
*2024*
Project Management
93.54

**University of Science Technology of Southern Philippines**
*2019*
Bachelor of Science in Electronics Engineering
2.3

## Skills

Electronics Engineering, Circuit design and Analysis, Microcontrollers and Embedded systems, Signal processing, Power electronics, VLSI design, Communication systems, Programming languages, Hardware description languages, PCB Design, Troubleshooting and Debugging, Mathematical modeling, Simulation and Analysis, Robotics and Automation, Technical communication, Renewable energy systems.

- Full Stack Software Development, Software Engineering, Cloud Computing, HTML, CSS, JavaScript, Git, React, Node.js, Express, Python, Data Science, AI, Flask, Django, Docker, Kubernetes, OpenShift, Microservices, Serverless, and Generative AI
- Project management, Strategic thinking, Business writing, Stakeholder management, Project charter, Change management, Career development, Organizational culture, Risk management, Quality management, Project execution, Problem solving, Effective communication, Agile management, Scrum, Influencing, Coaching, Procurement, Task estimation, Project planning.
- Data analytics, Data science, Data engineering, Spreadsheet, Data Integrity, SQL, Data cleansing, Data analysis, R programming, R studio, Decision-making, Spreadsheet, Questioning, Data aggregation, Data calculations, Data collection, Metadata, Data ethics, Tableau software, Data visualization, Presentation
- Search engine optimisation (SEO), E-Commerce, Email marketing, Display advertising, Marketing, Social media branding, Social media Analytics, Social listening, Customer engagement, Social media bidding, Customer relationship management (CRM), E-Commerce, Media planning, Spreadsheet Management, Marketing analytics, Digital marketing KPI's, Search engine marketing, Customer awareness, Website structure, E-commerce strategy, E-commerce platform, Website structure, Email writing, Email list segmentation.

## Experience

### ClinicMind

*May 2022 - Today*

Help System Designer

Produced tutorial videos and articles to facilitate user understanding of software functionality.
Authored comprehensive manuals, providing step-by-step instructions for software usage.
Generated update notifications to inform users about new software releases and features.
Provided responsive user support, addressing inquiries and concerns promptly and effectively.
Demonstrated strong communication skills in creating user-friendly documentation and assisting users.

### ESO Electronics

*June 2021 - April 2022*

Project Engineer

Managed business operations, overseeing day-to-day activities and strategic planning.
Provided exceptional customer support via email, addressing inquiries and resolving concerns promptly.
Developed detailed PCB instructions for manufacturing, ensuring accuracy and quality control.
Generated quotations for materials required in PCB production, optimizing cost-efficiency.
Demonstrated strong organizational and communication skills in managing diverse responsibilities.

### Innovuze Solutions Inc.

*March 2018 - June 2018*

Content Engineer Intern

Created web content, optimizing for SEO and increasing site traffic.
Designed PCBs for electronic products, ensuring functionality and compliance.
Conducted QA testing, identifying defects and improving product reliability.

## Projects

### Automatic Irrigation System using Raspberry Pi

Designed and implemented an innovative Automatic Irrigation System leveraging Raspberry Pi technology. Equipped with advanced features including a camera and moisture sensor, the system efficiently monitors plant health in real-time. Utilizing stepper motors for precise plant location, it ensures optimal irrigation coverage. Additionally, a web server interface provides users with seamless updates and remote control capabilities, enhancing user experience and plant management efficiency.

### Calamansi Image Processing

Developed three user-friendly programs with graphical user interfaces (GUI) using MATLAB image processing and Support Vector Machine (SVM) algorithms. These programs accurately detect common citrus diseases such as scab and oleocellosis, as well as determine the ripeness of Calamansi fruits. Leveraging sophisticated image processing techniques and SVM classification, the software offers efficient and reliable analysis, aiding in early disease detection and optimal harvesting decisions.

### Real-Time Oleocellosis Disease Detection

Software for Calamansi using Python Developed a Python-based software application capable of real-time detection of oleocellosis disease in Calamansi fruits. Leveraging advanced image processing techniques and machine learning algorithms, the software accurately identifies symptoms of oleocellosis, enabling prompt intervention to mitigate crop loss. The software's live detection feature provides farmers and agricultural professionals with immediate insights, enhancing disease management and crop productivity

### Tomato Defect Detection using MatLab

Designed and implemented a sophisticated software program with a graphical user interface (GUI) for detecting defects in tomatoes. Leveraging MATLAB's powerful image processing capabilities and Support Vector Machine (SVM) algorithms, the software accurately identifies various defects such as bruises, cracks, and discolorations. The intuitive GUI allows users to easily upload tomato images and obtain rapid defect analysis results, facilitating quality control and ensuring the delivery of high-quality produce to market.

### Electronic Arms Controlled by Arduino with Gyroscope Sensor and Laser Gun Prototype

Developed an innovative Electronic Arms system utilizing Arduino microcontroller technology, a gyroscope sensor, speaker, and LEDs. The system features a prototype laser gun mounted on the shoulder, which dynamically adjusts its direction based on the user's head movement detected by the gyroscope sensor integrated into glasses. This functionality is achieved through precise servo motor control facilitated by Arduino processing. The system showcases advanced integration of hardware components and real-time interaction, demonstrating practical applications of sensor fusion and control mechanisms.

### Miniature Electronic Warship

Designed and constructed a miniature warship model equipped with cutting-edge electronic functionalities. The warship boasts an auto night light feature for enhanced visibility during low-light conditions, ensuring safe navigation. Additionally, it features a voice-activated cannon system, allowing users to engage targets with voice commands. The integration of a water level sensor enhances operational safety by monitoring water levels within the vessel. Powered by motors, the warship demonstrates agile maneuverability and dynamic functionality, making it an impressive showcase of electronic innovation in naval modeling.

### Miniature Electronic Catapult

Crafted a standalone miniature catapult featuring advanced electronic control mechanisms. Utilizing Arduino microcontroller technology, the catapult is equipped with Bluetooth connectivity, enabling remote control and operation from a mobile device or computer. Precise servo motors facilitate accurate launching capabilities, allowing users to adjust launch angles and distances with precision. This project demonstrates the fusion of traditional mechanical engineering with modern electronic control systems, offering a unique and engaging hands-on experience in robotics and automation.

## Languages

English

Filipino

Spanish

## Reference


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