Jester Paul Arcas

Parañaque City • jesterpaularcas@gmail.com • 0905-317-2211 • jesterarcas.vercel.app

Education

Laguna State Polytechnic University Santa Cruz, Laguna
Bachelor of Science in Electronics Engineering September 2022
Certifications: PRC Licensed Electronics Engineer
Relevant Coursework: Programming, Networking, Microprocessors and Microcontrollers, Logic Circuits

Experience

MEDEV Medical Devices Corporation Parañaque City
Service Engineer August 2023 – Present

- Diagnosed and resolved software issues for medical devices, ensuring seamless operation.
- Managed 40 hospital and clinic accounts, generating **₱2.5M** in revenue through repairs and software support.
- Achieved a **25%** efficiency increase by optimizing machine uptime and enhancing equipment performance.
- Conducted engaging demos that led to **₱5M** in sales.
- Developed a method to retrieve **100 GB** of client's data valued at **₱1.5M**.

Technical Skills and Projects

Languages: HTML, CSS, JavaScript, C#, Python, Typescript, C/C++
Frameworks: .NET Core, ReactJS, Next.js, Express, Tailwind
Technologies: CRUD, Git, SQL, Artificial Intelligence, Internet of Things

Automated Aquaculture Monitoring and Control System GitHub

- Developed an end-to-end aquaculture management system using **Node.js**, **Express**, and **MongoDB** as database.
- Created a user-friendly **web interface** using Bootstrap for parameter adjustments and real-time monitoring.
- Programmed microcontrollers in **C** and **C++** to regulate actuators using sensor data.
- Leveraged a trained neural network with **25,720** data points for precise predictions (error margin of only **0.036%**).
- AI-driven crop growth optimization resulted in a **25%** faster growth rate compared to manual methods.

Real-Time Stock Information Platform GitHub

- Developed a web application using **React** (TypeScript) for the frontend and **.NET Core** for the backend.
- **Stock Watchlists:** Users can add stock tickers to personalized watchlists.
- **Real-Time Stock Data:** View essential information such as buy price, market cap and trading volumes.
- **Interactive Comment System:** Users can participate in discussions related to specific stocks.
- **User Accounts:** Implemented a system for managing favorites and personalized stock tracking.

Cell Tower Antenna Optimization Google Colab

- Developed a Python script for precise antenna placement.
- Reduced manual calculation time from hours to just **1 minute**.
- Extracted relevant information related to cell site distance, elevation, and tree growth allowance.
- Automatically generates visualizations and solutions for the given antenna parameters.
- Leveraged **pandas**, **numpy**, **matplotlib**, and **LATEX** for data manipulation, visualization, and solution generation.