



# KURT DECENA

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## EDUCATION

**Tanauan City College | Bachelor of Science in Computer Engineering (CPE)** | Trapiche Tanauan City Batangas | 2020 - 2024

**Relevant Courses:** Computer Architecture, Embedded System Engineer, Foundations of Programming, Software Engineering

## Objectives

I aim to secure a position in a dynamic organization where I can effectively apply my skills and expertise. I aspire to enhance my strong analytical and technical skills to help achieve the company's objectives and contribute valuable solution.

## PROFESSIONAL EXPERIENCE

**Sophie's Information Technology Inc – Intern** ; Lipa City, Batangas

*January 15, 2024 - March 4, 2024*

- Assisted the Secure Development team in designing Moodle prototype for Ilocos University using Figma
- Delivered weekly presentations to the Developer Secure Manager
- Completed the Moodle design project for Ilocos University independently
- Studied Cyber Security practices, Ethical Hacking and Software Development (SDLC)

## FREELANCE EXPERIENCE

**Gun Detection with Web Application using Yolov8**

*March 31, 2024*

This project aims to create a robust security system capable of automatically detecting firearms in real-time using IP cameras. Leveraging the latest advancements in computer vision and deep learning, this system employs the YOLOv8 (You Only Look Once) object detection algorithm, renowned for its speed and accuracy

- Developed Image processing CNN model to detect a gun using machine learning
- Developed a web-base application using flask in python
- Programming language: C++, Python
- Implemented communication: Over ethernet communication (TCP/IP)
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**Smart Car Safety IoT Device**

*March 31, 2024*

This project is driven by the critical need to prevent accidents and fatalities stemming from leaving vulnerable passengers unattended in vehicles.

- Programming language: C++
- Developed Embedded System that read the oxygen level and CO2 Level and also the presence of passenger.
- Implemented communication: I2C communication
- Microcontroller: Arduino Mega 2560 built in Esp8266 WIFI

## PROJECT EXPERIENCE

**An Intelligent Plate Number Recognition and Parking System at Tanauan City College**

*June 3, 2024*

The Intelligent Plate Number Recognition & Parking System at Tanauan City College controls and secures parking spaces for registered vehicles, using image processing (Machine learning) to recognize plate numbers and restrict access. It enhances security and management within TCC premises

- Implemented communication: UART communication and over ethernet communication (TCP/IP)
- Developed an image processing CNN model and a web application using flask in python
- Developed and designed a control gate mechanism for a parking system to manage entry and exit
- Programming language: C++, Python
- Microcontroller: Arduino Mega 2560

## Automatic Sub-Irrigation System using NodeMCU and Blynk Application

July 2022

It focuses on implementing an Internet of Things (IoT) solution for plant care, enabling plant owners to remotely monitor and manage their plants' watering needs.

- Programmer – I led the development of the entire system for the project
- Hardware System Integration – I oversaw the integration, assembling and syncing components to create a fully operational Automatic Sub-Irrigation System using NodeMcu and the Blynk App.

## SKILLS & INTERESTS

**Interests:** Gaming, Streaming, Esports, Basketball, Hiking, Badminton, Cook, Machine Learning

**Languages:** Native English and Filipino speaker;

**Technical:** Basic (HTML, CSS, JS), SQL, C++, Arduino, Python, Flask, Visual Basic or Software Design, Verilog, VHDL, Matlab, Assembly Language, Troubleshooting, Network Infrastructure and Embedded System, Machine learning

**Soft:** Time Management, Project Management, Communication Skills, Good Analytical Problem Solving, Adaptability, Critical Thinking, Leadership, Attention to Detail, Interpersonal Skills

## ACHIEVEMENTS AND EXTRACURRICULAR

- DEAN'S LISTER | Fourth Year | First Semester | 2023 – 2024
- DEAN'S LISTER | Third Year | Second Semester | 2022 - 2023
- Programming Competition | Champion | 2023 - 2024
- Programming Competition | 2nd place | 2022 - 2023
- Breadboarding Competition | Champion | 2022 - 2023
- Esport President | Invictus Animus ACCESS | 3 years | 2020 – 2023

## SEMINARS AND CERTIFICATIONS

- Basic Occupational Safety and Health (BOSH) with 2-hour Training of Trainer for Safety Officer 1 | DOLE | March 2024
- The Dynamics Of Cloud Computing | DICT | February 18, 2024
- Git Introduction to Version Control System: Who to Blame when Deployment Fails? | Tanauan City | April 6, 2024
- Data Analytics using Python Programming Language | Tanauan City College | March 27, 2024
- Cyber Crime Law in PH | Webinar | May 20, 2021
- Data Center and Network Infrastructure | Tanauan City College | April 1, 2023
- Cloud Computing: A discussion on leveraging cloud technology for IoT Devices | Tanauan City College | April 17, 2021
- Institute of Computer Engineers of the Philippines | ICpEP | October 29, 2022

## REFERENCES

*Engr. Ralph Laurence G. Visaya*

Professor



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