QUINN HARVEY G. PINEDA

Computer Engineering Student

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- EDUCATION -

Nuestra Señora De Guia Academy of Marikina - SHS

September 2021 - April 2023

Science, Technology, Engineering, Mathematics (STEM)

Graduated With Honors

Polytechnic University of the Philippines Institute of Technology (ITech)

September 2023 – Present (Exp. 2026)

Diploma in Computer Engineering Technology (DCpET)

- Specialization in Machine Learning
- Completed Reserve Officers' Training Corps (ROTC), National Service Training Program

— PROJECTS -

Terrarium Website | HTML, CSS, JavaScript

December 2023

• Developed a clean, responsive website using semantic HTML, CSS, and custom JavaScript

Air Quality Prediction (Philippine Cities) | Python, Scikit-learn, XGBoost, imbalanced-learn

February 2025

- Trained ML models (Linear Regression, Decision Tree, Random Forest, XGBoost, SVM) to predict AQI
- · Preprocessed, normalized, and balanced data using RandomUnderSampler
- Achieved R² = 0.51 with ensemble models; visualized results via Matplotlib and Seaborn

SignalFlux Dynamics | Arduino, C++

March 2025

- Coded adaptive traffic signals adjust light durations based on IR-sensed congestion
- Prioritized high-density lanes to reduce wait times in simulations
- Integrated hardware feedback and safety delays with team collaboration

Pneumonia Detection from Chest X-Rays | Python, TensorFlow, Keras, MobileNetV2

April 2025

- Built a deep learning model with MobileNetV2 for classifying X-rays as pneumonia or normal
- Applied data augmentation (rotation, zoom, flip) to improve generalization
- Achieved 87.66% accuracy in identifying pneumonia from X-ray images after training the model

Global Socioeconomic Correlation Analysis | Python, Pandas, Seaborn, Matplotlib

May 2025

- Analyzed global socioeconomic indicators across GDP, life expectancy, education, and fertility rates
- Processed data using Pandas and NumPy; visualized trends with heatmaps and scatterplots

Employee Information System | Java, MySQL

June 2025

- Developed a desktop HR tool with secure login, salary computation, and CRUD features
- · Linked SQL-based user database hosted on localhost; tested via Apache server emulator

Sniff-My-Fridge | ESP32, C++

June 2025 - July 2025

- Collaborated in a team to build a spoilage detection system using gas and humidity sensors
- · Triggered real-time alerts with buzzer, LCD, and LED indicators
- Calibrated MQ135 to reduce false positives from non-food gases

— TECHNICAL SKILLS ——

Languages: Java, Python, HTML, CSS, SQL, R, C++

Developer Tools: Git, Github, VS Code, Visual Studio, PyCharm

ML Tools & Libraries Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn, XGBoost, TensorFlow (basic)

Software Proficiency: AutoCAD, TinkerCAD, Microsoft Office Suite (Word, Excel, PowerPoint)

CERTIFICATIONS -

• TESDA NC II in Computer Systems Servicing, TESDA, October 2024

Great Learning – Online Courses

- Introduction to JavaScript, November 2023
- Python Fundamentals for Beginners, October 2024
- Programming Basics, October 2024