JOREN VARQUEZ

COMPUTER ENGINEER

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TECHNICAL SKILLS

Programming: Python, PHP, JavaScript, C/C++

Frameworks: TensorFlow, React, Flutter

AI & Vision: OpenCV, YOLOv8, CNNs

Database: MySQL, Firebase

Tools: DJI SDK, WebRTC, GitHub, VS Code

Soft Skills: Leadership, Communication, Teamwork

EDUCATION

BACHELOR'S DEGREE
Bachelor of Science in Computer Engineering
Bohol Island State University – Main Campus (2021–2025)

REFERENCES

Available upon request.

PROFESSIONAL SUMMARY

Motivated and innovative Computer Engineering graduate with hands-on experience in Artificial Intelligence, Web Systems, Embedded Systems, and Drone Technology. Skilled in developing intelligent automation solutions that seamlessly integrate hardware and software to solve real-world problems. Passionate about advancing AI-driven applications, robotics, and web-based control systems. Eager to contribute to cutting-edge projects and grow within dynamic tech environments in your company.

PROFESSIONAL EXPERIENCE

PROJECTS **JAN 2025– PRESENT**

Aerial Detection of Fall Armyworm (FAW) Infestation in Corn Field

- *Designed an AI-powered drone-based system using TensorFlow and OpenCV to detect corn plant infestations.*
- *Integrated real-time DJI drone control and video analysis through WebRTC for instant detection results.*
- *Achieved precise classification accuracy with a custom CNN model.*

Baptism Scheduling and Certificate Request System

- *Developed a web-based PHP + MySQL application for managing parish baptism schedules and records.*
- *Implemented file upload, automated certificate generation, and secure database storage.*

3D Design for FABLABAR++ Academic Exhibit

- *Created 3D visual assets and animations in Blender for educational and research presentations.*

4-Bit Binary Subtractor

Technologies: *IC 7483/7486, 7-Segment Display, Logic Circuit Design*

- *Designed a 4-bit binary subtraction circuit using combinational logic and arithmetic ICs.*
- *Displayed real-time subtraction results using 7-segment indicators with negative output detection.*

Autonomous Obstacle-Avoiding Robot

Technologies: *Arduino, Ultrasonic Sensors, Motor Driver, C/C++*

- *Built a microprocessor-based robot capable of detecting and avoiding obstacles in real time.*
- *Programmed sensor logic to calculate distance and trigger directional motor movement.*

EXPERIENCE **JUNE 2021 – DEC 2024**

- ***Photographer & Video Editor*** *— BISU ICPEP | 2024–Present*
- *Captured and edited event materials for BISU-ICPEP; improved digital visibility through visual content.*
- ***Embedded Systems Developer (Academic Project)*** *— BISU | 2024*
- *Built IoT prototypes using Arduino and Raspberry Pi for automation and sensor data collection.*
- ***Neural Network Research (Capstone Project)*** *— BISU | 2025*
- *Developed and optimized CNN models for crop disease detection using TensorFlow and Python.*