

Axcel Justin D. Tidalgo

tidalgo.ajd@gmail.com | Quezon City, NCR, 1103 | (+63) 906 573 1682

Website: <https://ajtidalgo.info>

LinkedIn: <https://www.linkedin.com/in/axcel-justin-tidalgo-1a3940217/>

EXPERIENCE

Dynamic Business Outsourcing Solutions

Quezon City, Metro Manila

Information Technology Intern

May 2024 - September 2024

- Managed and maintained inventory of 1,000+ IT assets, ensuring accurate tracking and compliance.
- Assisted in the setup and maintenance of local network infrastructure.
- Provided hands-on support for 30+ hardware, software, and connectivity troubleshooting cases.

Freelance

Remote

NFT & Web Integration Developer

Dec 2022 - September 2023

- Developed 10+ automated VM environments for blockchain token generation and deployment.
- Integrated 20+ smart contracts into web interfaces, enabling secure digital asset transactions.

Education

De La Salle University

Manila, National Capital Region

Bachelor of Science in Computer Engineering

June 2025 (Expected)

- Focused coursework: Neural Networks, Machine Learning, Artificial Intelligence
- Thesis: Developed a wearable visual aid integrating a custom object detection model and Luxonis DepthAI for 3D spatial inference
- Capstone Project: Created an embedded vision system for real-time situational awareness
- Relevant Tools: Python, OpenCV, TensorFlow, Luxonis DepthAI, Embedded C++, Linux

Skills

- **Technical Skills:** Python, Flask, OpenCV, TensorFlow, PyTorch, Keras, scikit-learn, NumPy, Pandas, Matplotlib, SQL, Git, OpenAI API, LangChain, Linux, DepthAI
- **Languages:** Fluent in English, Fluent in Filipino
- **Core Competencies:** AI Model Training, AI Development, AI System Integration, Prompt Chaining, Backend Web Development, Python Programming, Computer Vision

Projects

Smart Wearable Vision Aid for the Visually Impaired

Capstone Academic Thesis

- Developed a wearable AI-powered visual aid by combining a custom object detection model with a pre-trained Luxonis DepthAI model, allowing for real-time spatial awareness through multimodal inference.
- Contributed to the AI training pipeline, assisting in dataset preparation, augmentation, and model tuning for embedded use.
- Enabled cross-compatibility across multiple microcontrollers through modular serial interfaces and protocol alignment.
- Deployed AI models on a Linux-based embedded system, optimizing for memory and CPU constraints to ensure stable performance on low-spec hardware.
- Integrated fault handling, debugging tools, and communication protocols for improved reliability and responsiveness.

MineWatch-AI-PH: Drone-Based Visual Analysis for Open-Pit Mining

Personal Capstone Project

- Developed a full-stack web application to analyze drone footage of mining sites using GPT-4 for environmental risk assessments
- Leveraged OpenAI API with Python to generate structured observations per video frame through prompt engineering and modular input pipelines
- Designed the backend using Flask and Jinja for dynamic content rendering, server-side streaming (SSE), and image inference workflows
- Implemented frontend with HTML, CSS, and JavaScript to handle user uploads, display results, and visualize frame-based insights

Serverless Password Strength Validator

Personal Project

- Created a serverless API using AWS Lambda, API Gateway, and Python
- Incorporated cybersecurity standards to validate password entropy and detect breached strings
- Applied cloud-native practices, REST API design, and testing strategies

Involvement

De La Salle University - International Educational Tour Student Organizing Committee

Tokyo, Japan

Laguna Chair Representative for Documentations

Sep 2023 - Dec 2023

- Managed internal and external documentation for 30+ students and 30+ professors, ensuring compliance with university and Commission of Higher Education (CHED) regulations for international travel.

De La Salle University - University Student Government

Manila, National Capital Region

Chairperson for Documentations for the Laguna Campus President

Year 2019 - Year 2020

- Management of internal and external documentation for over 3 school events and projects, involving more than 300 participants.
- Ensured accurate and timely processing and archiving of all event-related documents, facilitating communication and coordination across departments