

# John Rafael L. Jocson

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## EDUCATION

### Mapua Malayan Colleges Laguna

Cabuyao, Laguna

Bachelor of Science in Computer Engineering

2020-2024

- **Awards/Honors:** Latin Honors, Cum Laude. Presidents lister AY 2020-2023, Deans Lister AY 2020-2024

## WORK EXPERIENCE

### Playbook Sports

Hoboken, NJ (Remote)

Associate Developer

Jan 2025 - Current

- Create internal automation solutions and external webapps using n8n to provide AI/LLM functions to most apps
- Used Django framework to handle a client's request for a standalone scheduler/drafter synced to our base SAAS
- Made lead generation that runs constantly in the background using n8n to prospect for potential B2B customers
- Built backend for software wide chatbot made with RAG agent and Vector store database to retrieve FAQs

### Pixel8 Web Solutions and Consultancy

Remote

Backend Development Intern

2024

- Developing backend systems using REST API on different web frameworks (Django, Laravel, Ruby on Rails)
- Created backend API for projects such as To-Do list, Login/Authentication and remade it on different frameworks
- Become team leader for fellow interns during my stay and acted as project manager for the team

## Projects And Publications

### Leaf Disease detection with CNN and data center management

ICCAE

Sole Developer

20-22 March 2025

- Leaf disease detection using an Image classification convolutional neural network model
- Dashboard backend app made with Django. Contains all information about the field diseases/pests
- Camera app runs on Raspberry pi 5 to automatically send data to server running in debian that hosts the dashboard
- Uses both IOT and web development concepts to ensure smooth operation between on field sensors and database

### Implementation of a Single Cycle Datapath for the Design of a Low-process Control in XC3S500E

ICCAE

Co-Developer

14-16 March 2024

- A Proof of concept in running a RISC-V Architecture on an FPGA board for low-process control
- Worked on some of the operators like the multiplexer and adder using verilog
- Also worked on documentation and output verification to see if all operations follow the expected output

### IoT-Based Monitoring control system for increase in seed germination rate of plants

Thesis

Co-Developer

2024

- Automated moisture, humidity, light, and temperature control using Arduino sensors to facilitate germination
- Made with Arduino to control the sensors and variable control and ESP32 to handle network operations
- Mainly worked on the sensor/device control on arduino and setting up webserver for the dashboard

## SKILLS & INTERESTS

**Programming language:** Python, C#, Verilog, HTML, CSS, JavaScript, Java, Arduino, Bash Scripting

**Tools:** n8n, Hubspot, Salesforce, Git, Github, Heroku, Hasura, Google Cloud, Supabase, Confluence, Jira, Hostinger

**Stack:** Django, Astro, Tailwind, Bootstrap

**Database:** MySQL, PostgreSQL, Mariadb, SQLite, Mongodb, GraphQL

**Languages:** English (Fluent), Tagalog (Native)

**Certifications:** Compia ITF+

**References:** [agdsabino@gmail.com](mailto:agdsabino@gmail.com), [akcspark@gmail.com](mailto:akcspark@gmail.com), [johnvincentespinosa1@gmail.com](mailto:johnvincentespinosa1@gmail.com)