

# Ayan Lodovice Batulan

## Computer Science • DOST Scholar

**Address:** #38 Crystal St. Twin River, Parang, Marikina

**Email:** ayanbatulan2132@gmail.com

**Contact Number:** (+63) 908-319-3522



## CAREER OBJECTIVE

Aspiring Computer Scientist with a strong foundation in Machine Learning, Data Science, and Software Development, seeking to leverage analytical and programming skills to develop innovative solutions and contribute to impactful projects in a dynamic, growth-oriented organization.

## EXPERIENCE

### DROPZONE COMPUTER SHOP

*Cyber Cafe Assistant*

**Metro Manila, Marikina**

**2019-2022**

- Gained practical experience in basic networking and system maintenance, building a foundation for advanced technical concepts.
- Optimized daily operations by monitoring computer systems and resolving hardware and software issues to ensure uninterrupted service.
- Managed inventory by processing stock levels and sales data, applying database management principles.
- Troubleshoot technical problems related to software, networking, and customer systems, honing diagnostic and problem-solving skills.

## DESIGN PROJECTS COMPLETED / RESEARCH

### Research Gap Finder (December, 2024)

A website tool to collect and analyze thesis libraries to identify research gaps and underexplored fields in various disciplines.

### Inarawan Coffee Shop Branches (July, 2024)

Developed a Point-of-Sale and Inventory Management System for a coffee shop using ReactJS, TailwindCSS, Python, NodeJS, and PostgreSQL.

### Algorithmic Abyss: Applying Procedural Algorithms for Dungeon Map Generation in Games (May, 2024)

Developed a Python-based Dungeon Crawler Game with random map generation using Drunkard's Walk, Binary Space Partitioning, and Cellular Automata algorithms.

### Advanced Encryption Standard (AES) and Least Significant Bit (LSB) Steganography (May, 2024)

Developed a Python system that uses encryption techniques such as AES and LSB.

### Comparative Assessment of Renewable Energy in the Philippines (April, 2024)

Conducted a simulation-based analysis comparing wind and solar energy resources for sustainable energy planning in the Philippines.

### Lunti App: Junk Shop Recycling for Rewards (December, 2023)

Developed an app that promotes effective recycling by allowing users to earn points redeemable for goods at participating retailers and branches.

### Algorithm Animation (November, 2023)

Developed ReactJS animation for Quick Sort, Binary Search and Merge sort algorithm with TailwindCSS

### Library System with NLTK and Sentiment Analysis (November, 2023)

Designed a library system utilizing NLTK for sentiment analysis to improve user experience through feedback analysis

### AGLZZ Computer Parts Shop (September, 2022)

Developed a Java-based inventory and point-of-sale system with CRUD functionality using MySQL as the backend.

### Tea-amo (November, 2021)

Developed a C++ based inventory management and point-of-sale system with CRUD functionality.

## SEMINARS ATTENDED

### Artificial Intelligence from A-Z: Fundamentals of Data Science and Beyond (December 6, 2022)

*Technological Institute of the Philippines*

### Cyber Security Buff: Defending Against SQL Injection and Brute Force Assaults (April 27, 2022)

*Technological Institute of the Philippines*

## EXTRA AND CO-CURRICULAR ENGAGEMENTS AND VOLUNTEER WORKS

### Association for Computing Machinery (ACM)

*Member*

October 01, 2023 - Present

### Society of Scholars (SOS)

*Member*

August 01, 2024 - Present

### Career Center (CC)

*Member*

August 01, 2024 - Present

### Codecademy

*Member*

August 04, 2021 - Present

### LeetCode

*Member*

January 02, 2023 - Present

### GitHub

*Member*

December 12, 2022 - Present

## KNOWLEDGE AND SKILLS

**Technical Skills:** Proficient in Python, Java, C++, JavaScript, HTML and CSS, React.js, Flutter, MySQL and experienced with Git.

**Software Development:** Proficient in developing efficient and scalable software solutions, combining technical expertise with a focus on user experience and performance optimization.

**Design Tools:** Skilled in creating detailed flowcharts, process diagrams, and system designs using Lucidchart and Photoshop.

**Problem-solving:** Experienced applying analytical thinking and programming to troubleshoot and optimize systems and workflows.

**Collaboration:** Strong leadership and teamwork abilities, fostering effective communication.

## REFERENCE

Jess N. Garcia

OJT Faculty-in-Charge

Technological Institute of the Philippines

jgarcia.cs@tip.edu.ph

0999-596-5685