



Jacob E. Barcelona

Information Technology
Student

Profile

A versatile student who aspires to be part of something that will help progress my skills and knowledge. Demonstrated experience in various roles, mostly as Lead Programmer, and System Analyst at various projects, with a focus on Django, Dart, and Android Studio.

Contact

- 0956-213-5833
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- www.github.com/cob-byte
- Tondo, Manila

Skills and Technologies

- Versatility:** Able to adapt to different roles and language with a given time
- Listening:** Open to learning from others and taking advice
- Leadership:** Has an experience of leading teams and projects
- Languages:** Java, Python, C++, JavaScript
- Cloud Services:** Railway
- Database:** MySQL, PostgreSQL,
- Framework:** Django
- Others:** HTML, CSS, GitHub, OpenCV, Tensorflow

Education

(2020–present)

PAMANTASAN NG LUNGSOD NG MAYNILA

Bachelor of Science in Information Technology

Dean's Lister for three (3) consecutive years

(2018–2020)

TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES

Science, Technology, Engineering, and Mathematics Strand

Graduated with Honors

(2014–2018)

LAKAN DULA HIGH SCHOOL

Graduate

(2008–2014)

LIBRADA AVELINO ELEMENTARY SCHOOL

Graduate

Achievements

- Nervos Network's Devpost Hackathon – Web3 World Challenge – Category Winner
- Philippine Web3 Festival Hackathon – Participant
- Hack-Attack: Forge New Ideas for Solving Real-World Problems (Ideathon) – Participant
- Google Developer Student Clubs PLM Member (2020 – present)
- Aesthetic Literary Club Treasurer (2018 – 2020)

Experience

(2020–2020)

**TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES,
INFORMATION TECHNOLOGY AND SERVICES OFFICE (ITSO)**

Work Immersion

- Gained practical experience in managing IT inventory, including system units, monitors, and keyboards.
- Acquired knowledge of various hardware components,
- Observed a physical server in operation, guided by a senior team member.
- Learned and applied system cloning.
- Gained practical experience in using sound and lighting systems.

Projects

IOT-POWERED BABY CRADLE WITH COMPUTER VISION

- Developed a Flutter application that acts as a remote control for a Raspberry Pi-powered baby cradle with various features that runs on python scripts.
- Preprocessed and trained MTCNN for baby's face and landmark detection to ensure safe sleeping position. Used FIDBB for benchmarking and WIDER Face for evaluation.
- Implemented MediaPipe's face mesh and pose detection for automated sleep tracking.

MEDIQS: HEALTH CENTER'S EMR PORTAL SYSTEM WITH DISEASE OUTBREAK FORECAST

- Created a web-based platform for health centers in Manila to manage patient health records and scheduling using Django, HTML, CSS, JavaScript.
- Used DOH data of disease cases from 2016 to 2022 for the structural time series to forecast potential outbreaks.
- Used heuristic algorithm for patient's appointment prioritization.
- Deployed in production using railway to conduct testing for I.T. professionals and apply their inputs.

PHARMACY MANAGEMENT SYSTEM - PURE C++

- Developed a simple pharmacy management system to apply object-oriented programming four major principles. Primarily, encapsulation.

RE-COM: COMMUNITY RESOURCE MANAGEMENT SYSTEM OF BARANGAY

- Developed a Java mobile app with a "Community Consensus" polling system for resident participation in barangay decisions.
- Utilized a Reddit-like upvote/downvote system for relevance filtering.
- Created an announcement board and emergency hotline for real-time updates and emergency responses.
- Incorporated a scheduling system for efficient management and reservation of barangay resources and facilities.

IPLM: INTEGRATED PLM - COLLABORATION PROJECT OF UNDERGRADUATE IT STUDENTS

- Developed a web-based Student Information System using Django.
- Lead as a backend in the admin panel and collaborated with other user roles on the website.
- Handled data structure to different user roles.
- Revamped the admin panel using Simple UI.

CARE PAW BABIES - PET'S E-COMMERCE

- Tried using WordPress to create an E-commerce for our project.
- Run through localhost using XAMPP and MySQL

Certificates

- Unlocking the Potential: Google Workspace for Students in Learning Transformation
- Introduction to Microsoft Excel: Boosting Productivity and Efficiency
- CALABARZON Cyber Talks with the Academe
- AI: How the technology can be utilized responsibly and reliably as Human support
- Getting Started with ReactJS - A Beginners' Guide
- Getting Job-Ready with AI - An Engineering Focus
- Prices Prediction using AI in Modular Code
- Exploring the Power of Machine Learning
- The Role of AI in Cybersecurity
- C++ Programming Fundamentals and AI Integration

Character Reference

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