

Noel Josh Casin

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EDUCATION

FEU INSTITUTE OF TECHNOLOGY

Bachelor of Science in Computer Science

Manila, Philippines

Expected 2026

- **Thesis:** RoaDry: Real-Time Flood Monitoring and Safe Route Optimization in Metro Manila Using Crowdsourcing, Web Scraping, and Graph-Based Algorithms for Android and iOS

- **Relevant Coursework:** Object-Oriented Programming (Python, C++, Java), Data Structures, Algorithms, Machine Learning, Web Development (HTML,CSS,PHP), Mobile Application Development

SAN FELIPE NERI CATHOLIC SCHOOL

Science, Technology, Engineering, and Mathematics

Mandaluyong, Philippines

2022

PROJECTS & EXPERIENCES

RoaDry: Real-Time Flood Monitoring and Safe Route Optimization in Metro Manila Using Crowdsourcing, Web Scraping, and Graph-Based Algorithms for Android and iOS

Project Manager | 2024 – 2025

- Led and coordinated a multidisciplinary team throughout the project's development, covering both system programming and research documentation.
- Managed project timelines, deliverables, and task distribution to ensure all deadlines were met efficiently.
- Learned and implemented Dart programming language for mobile application development.
- Set up and configured Firebase for database management and real-time data synchronization.
- Integrated Azure Vision AI for image processing to detect flood and non-flood scenarios.
- Developed and utilized APIs and web scraping with NLP techniques to gather verified data from news outlets.
- Applied Dijkstra's algorithm to compute the shortest and safest routes using open-source road network data.
- Conducted app testing, including verifying image processing accuracy, shortest path generation, and proper display of crowdsourced and web-scraped data.

FITCAL: Web-Based Fitness Tracking and Health Management Application

Lead Developer | 2024

- Designed and developed a fitness tracking web application that integrates BMI calculation, calorie tracking, workout planning, and motivational features.
- Utilized PHP, MySQL, HTML, CSS, and JavaScript to build a secure, responsive, and user-friendly interface.
- Implemented user authentication, session management, and secure database storage for personal fitness data.
- Developed core modules including a PR (Personal Record) calculator, Progress Tracker, and Workout Planner with customizable routines.

SKILLS & INTERESTS

Language: Fluent in Filipino and English; Basic conversational Mandarin (Pinyin)

Technical Skills: Python, C++, Java, Dart, HTML, CSS, PHP, SQL, Mobile Programming, Frameworks & Tools (Firebase)

Certification: DevNet Associate Course, PMI Project Management, ITS Python, CCNA: Introduction to Network, Civil Service Eligibility (Professional Level)

Interests: Front-End Development, Back-End Development, Gaming