

Prince Czedrick M. Nepomuceno

[linkedin.com/in/pcmnepomuceno/](https://www.linkedin.com/in/pcmnepomuceno/) • Montalban, Rizal, 1860 • pcmnepomuceno@gmail.com • 09298109934

Technical Skills

Languages: Python, Java, JavaScript, C, HTML, CSS; **Mobile Development:** Flutter (Dart); **Web Development:** MERN Stack (MongoDB, Express.js, React.js, Node.js), FastAPI; **Frontend Technologies:** React, Tailwind CSS; **Databases:** Firebase (Firestore, Authentication, Storage), MongoDB, MariaDB (SQL); **Tools & Platforms:** Git, GitHub, Figma, Postman; **Concepts & Practices:** REST APIs, Object-Oriented Programming (OOP), Role-Based Access Control (RBAC), Database Design, Agile Development

Education

University of the Philippines Los Baños

Los Baños, Laguna

BS Computer Science

July 2026

Relevant Coursework: Data Structures and Algorithms, Object-Oriented Programming, Software Engineering, Web Programming, Database Systems, Computer Networks, Information Retrieval, Artificial Intelligence

Professional Experience

Limitless Lab | *Software Engineer Intern (hybrid)* | Flutter · Firebase · Dart

June 2025 - July 2025

- Developed a cross-platform inventory and job order management system for fashion and tailoring businesses using Flutter and Firebase.
- Implemented user-specific data filtering and authentication checks, ensuring secure and role-aware data access across modules.
- Built core business features including inventory management, job order workflows, transaction tracking, and fabric management systems.
- Designed and enhanced multiple UI components including dashboards, modals (Sell, Job Order, Transactions), and logbook interfaces, improving usability and user experience.
- Implemented a logging system for multiple entities (products, fabrics, transactions, job orders, users) to support activity tracking and system transparency.
- Refactored and modularized large application components, improving maintainability, performance, and code structure.
- Fixed UI/UX issues and improved application stability through debugging, error handling, and workflow optimization.

Projects

CosRec (FastAPI, React, Tailwind CSS, Python)

- Developed a hybrid image–text retrieval system for cosplay item matching, combining Vision Transformer embeddings and TF-IDF-based text similarity to improve search relevance through a unified ranking pipeline.
- Built a full-stack web application using FastAPI, React, and Tailwind CSS, implementing a weighted hybrid retrieval model with a tunable parameter (α), optimized at $\alpha = 0.1$ during evaluation.
- Evaluated system performance on a curated dataset of 500 items, achieving up to 97.8% Top-K Accuracy, ~ 0.46 Precision@5, and high MRR, supported by user studies showing improved usability over single-modality approaches.

PICSEL (PostgreSQL, Express.js, React.js, Node.js)

- Contributed to the development of a web-based room reservation and account management system as part of a collaborative software engineering project.
- Designed and implemented frontend features including reservation workflows, account dashboards, administrative interfaces, and reusable UI components using React.
- Refactored and modularized application components, improved routing and modal workflows, and resolved UI/UX issues to enhance maintainability and user experience.