

KARL CYRUS CELDA

Cavite, Philippines | +639687171172 | celda.karl.cyrus110@gmail.com | linkedin.com/in/celdakarlcyrus | github.com/karlcyrus

Education

Bachelor of Science in Computer Science, Cum Laude | Cavite State University - CCAT Campus

2022 - 2026

Awards: Consistent Vice President's Lister (2022 – 2026)

Technical Skills

Languages: Java, Python, C#, TypeScript, SQL (MySQL, PostgreSQL)

Frameworks: Next.js, React.js, Unity, Springboot, Vite, Tailwind CSS

Tools & Concepts: Supabase, Git/GitHub, pgvector, Gemini AI API, RAG Architecture, Machine Learning, OOP, Data Structures

Experience

Software Developer Intern | Build2Last Construction Corporation

July 2025 - August 2025

- Assisted in completing a client-based project by fixing backend logic.
- Handled front-end implementation for the project, fixed component-related issues, and worked with Supabase for database integration.
- Actively collaborated on a Github-hosted codebase, managed local setup and npm workflows.

Student Assistant | Cavite State University - CCAT Campus

March 2023 - June 2024

- Managed a team of student assistants, reviewing their DTR and accomplishment reports for accuracy and completeness.
- Performed data cleaning and normalization in Excel to parse student demographics and deduplicate scholarship records to ensure dataset integrity.
- Facilitated student orientations and delivered informational presentations to large assemblies of incoming freshmen, ensuring clear communication of critical university guidelines.

Projects

PaperBrain: AI-Powered Document Q&A Pipeline (RAG)

March 2026 - Present

- Built a full-stack Retrieval-Augmented Generation (RAG) application allowing users to securely upload documents and query them using natural language.
- Engineered a robust data processing pipeline using Next.js to parse text, generate chunks, and create 768-dimensional vector embeddings.
- Orchestrated streaming AI responses via Google Gemini REST API, grounding all answers exclusively in uploaded context to eliminate AI hallucinations.
- Skills:** Next.js, TypeScript, Tailwind CSS, Supabase (pgvector), Gemini AI API, RAG Architecture, Git/Github

NAvSU: An Augmented Reality-Based Campus Navigation System

November 2025 – March 2026

- Architected an AR-based campus navigation application utilizing Unity and AR Foundation to provide real-time, turn-by-turn spatial guidance.
- Implemented Dijkstra's Algorithm for optimal pathfinding across geo-referenced campus nodes, improving campus accessibility for new students and visitors.
- Skills:** C#, Unity, AR Foundation, Pathfinding Algorithms, Mobile App Development, 3D Visualization, Git/Github

QR-Based Teacher Attendance and Schedule Management System

July 2025

- Debugged and finalized a React-based attendance portal during an OJT placement, resolving critical logic errors in the legacy codebase.
- Engineered a robust QR scanning module with timestamp logging and duplicate check-in prevention, ensuring accurate daily attendance tracking.
- Developed administrator features including secure Supabase database operations and dynamic schedule generation for printable reports.
- Maintained strict version control workflows using Git/GitHub, effectively communicating with the project lead and managing pull requests.
- Skills:** React.js, TypeScript, Vite, Tailwind CSS, Supabase, Git/GitHub

Certifications

- Python Essentials 1 | CISCO | May 2025
- Fundamentals of Python Programming | Data Analytics Philippines | April 2025
- Data Analytics Essentials | CISCO | October 2024
- Querying Fundamentals with MySQL Essentials for Beginners | DAPH | October 2024