Alyanna Cabrera

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Education

De La Salle University   Manila, Philippines
BS in Computer Science Major in Software Technology.   June 2021 - August 2025
- **Magna Cum Laude** (CGPA: 3.736/4.000)

Experience

Private Retail Client   Manila, Philippines
Software Developer (Contract)   August 2024 – December 2025
- Built a **locally hosted inventory system** using **Node.js** and **EJS** based on on-site workflow audits.
- Leveraged **jsPDF** to **automate invoice generation** with precise alignment for legacy printer stationery.
- Optimized UX via **responsive EJS templates** and **migrated legacy data** to a modernized database.
- Led **User Acceptance Testing (UAT)** and iterative feature refinements to align with business needs.

Abenson Ventures, Inc.   Manila, Philippines
System Development Intern   May 2024 – July 2024
- Developed **high-fidelity frontend prototypes** using **EJS** and **JS** to accelerate stakeholder approval.
- Engineered a **reusable component library** with **Vanilla CSS**, ensuring system-wide design consistency.
- Standardized **QA processes** by implementing a **code review framework** to boost development efficiency.
- Collaborated in an **Agile/Scrum team** of 7, utilizing **sprint cycles** to ensure on-time delivery.

Pearl S. Buck Foundation Philippines Inc.   Manila, Philippines
Full-Stack Developer   September 2023 – December 2023
- Developed a **web-based Sponsor Record Management System** for centralized sponsor data access.
- Engineered a **responsive layout** to ensure platform accessibility across all device types.
- Collaborated in an **Agile/Scrum team** of 7, utilizing **sprint cycles** to ensure on-time delivery.

Technical Projects

ArchBot: University Knowledge Graph & Chatbot   Software Developer
- Built an inquiry chatbot using **Gemini 2.0 Flash** to automate complex university processes.
- Developed a **web-scraping pipeline** to transform unstructured newsletters into structured JSON.
- Implemented **Advanced RAG** with **multi-hop reasoning** to resolve multi-layered student queries.
- Enhanced accuracy via **multi-turn validation prompting**, enabling LLM self-correction logic.

AnimoHub: Distributed Fault-Tolerant Enrollment System   Full-Stack Web Developer
- Engineered a **distributed system** using **ASP.NET Core** across 4 nodes to eliminate single points of failure.
- Implemented **Service Isolation** ensuring the system remains operational during specific node outages.
- Designed a **"Fail-Fast" detection logic** to identify downtime and prevent cascading errors during enrollment.

Activities

DLSU Dr. Andrew L. Tan Data Science Institute (ALTDSI)   Research Member
- Published research in **Springer's LNNS series** for the **NLPIR 2025** conference (Scopus indexed).
- Built an **end-to-end KGQA pipeline** involving KG construction and automated data collection.
- Achieved **93.14% accuracy** in node generation during **information extraction** and **graph creation** phase.
- Validated system with 567 facts, yielding a **93.52% F1 score** and a **94.86% Recall rate**.

Skills

Technical: C, C++, C#, Java, Python, HTML, CSS, JavaScript, React, Node.js, Next.js, MongoDB, SQL
Language: English (Fluent), Filipino (Native), Hokkien (Basic), Mandarin (Basic)
Tools: Microsoft Office, Figma, Canva, Git