Aebrahm Clyde P. Ramos
aebrahmramos.dev@gmail.com | linkedin.com/in/aebrahmramos |
github.com/AebrahmRamos | aebrahmramos.dev

Programming Languages: HTML/CSS, Javascript, Python, Java, C, x86 Assembly, Risc-V Assembly, AVX2 Assembly,

Frameworks/Libraries: React, Node.js, Express, Next, Cuda, Firebase, Supabase, PayloadCMS, Contentful

Tools/Technologies: Github, Docker, GCP, Azure, Agile, DigitalOcean

Databases: MySQL, SQL, SQLite, Firebase, MongoDB

Competitions:

Globe Innovania 2025 - Top 2

Education

De La Salle University (DLSU) Manila, Philippines August 2027

B.S. in Computer Science - Major in Computer Systems Engineering

Concepts:

Software Development:
Object-Oriented Programming (OOP), Data Structures, Algorithms, Software Engineering Principles, Web Development, Database Modeling, Database Design

Computer Systems Engineering:
Computer Organization and Architecture, Operating Systems, Microprocessor Interfacing, Digital Logic Design, Mathematical Modeling for Computer Systems, Electronic Circuits, Linear Circuits, Digital Signal Processing

Papers:

Philippine Computing Sciences Congress
Content Extraction from Scanned Forms through Optical Character Recognition was accepted and presented to

EXPERIENCE

Google Developer Group on Campus DLSU

- **Chief Executive Officer** | September 2025 - August 2026
  - Spearheaded the development of internal tools and systems designed to enhance organizational productivity and efficiency
  - Currently implementing and processing workshops to upskill officers on Google products
- **Chief Developer (Executive)** | October 2024- August 2025
  - Spearheaded the development of internal tools and systems designed to enhance organizational productivity and efficiency
  - Created a dedicated recruitment website that streamlined the application process, contributing to the significant increase in membership., resulting in tripling of membership from 120 to 360 members and officers.
  - Collaborating with partner student organizations to develop and implement their websites, expanding their reach and impact.
  - Initiated a partnership with both the University Student Government and Computer Studies Government to develop web-based solutions aimed at improving student's quality of life.
  - Led the development for esp-32 based locally ran facial recognition attendance system for org events, organizational portal for optimizing org workflow and to reduce dependence on third party softwares, and Retrieval Augmented Generation chatbot for student services.
- **Logistics Officer and Equipment Handler** | October 2024- Present
  - Utilized google suites applications to track timelines, tasks, and to allocate resources and manpower effectively.

- Successfully helped implement events both in and outside the university.
- Collaborated closely with the point of contact for the partnerships and other team members to coordinate and supply logistical needs.
- Effectively troubleshoots technical difficulties before and during the event

Vison Technologies Corporation — *Research Apprentice (Internship)*

December 2024 - July 2025

- My team and I recently had our research paper on Optical Character Recognition accepted for presentation at the Philippine Computing Science Congress. This achievement, accomplished in under 9 days, highlights our rapid research and analytical capabilities.
- I am also solely involved in the development of a Time-Based, Server-Authenticated Desktop Access Control System for real-world business implementation the TITAN computer vision software at VISON Technologies.
- Collaborated on setting up and configuring a proxmox-based computational server to provide computing resources for the research office members

University Student Government, DLSU — *Executive Director for Web Development*

December 2024 - July 2025

- Spearheads the development and maintenance of the University Student Government's (USG) website focusing on user experience and accessibility while providing the tools necessary for the students.

Outdoor Retail Company, USA — *Remote, Freelance Frontend Developer*

October 2024 - March 2025

- Developed and implemented a library of reusable Shopify components using Liquid, HTML, and CSS to streamline future site updates.
- Redesigned pages of the e-commerce storefront to be fully mobile-responsive, ensuring a seamless user experience across all devices.

ORGANIZATIONS

DLSU Applied Computing and Machinery (DLSU ACM) — *Activities Officer*

October 2024 - July 2025

- Improved the usability and management of the currently used booth attendance tracker for an annual college wide event.

DLSU Microsoft Student Community

- Research and Development Officer | October 2024 - July 2025
- *Technical Development Officer* | *November 2023 - October 2024*

PROJECTS

Operating System Emulator | *C++20, STL, pthreads, Expect (test scripts), Makefile*

Command-line OS simulator that models process scheduling, virtual memory, and multi-core CPU allocation.

Developed a configurable OS simulator in C++ implementing FCFS and Round Robin schedulers (configurable quantum), virtual memory paging with LRU page replacement, and first-fit physical memory allocation. Includes a small instruction language (DECLARE, ADD, READ, WRITE, PRINT), automated process generation, real-time monitoring commands (vmstat, process-smi, screen), backing-store snapshots, and test harnesses for reproducible experiments and performance visualization.

Nodado General Hospital Management System | *React, Node.js/Express, Sequelize (MySQL), Socket.IO, JWT, bcryptjs, Ant Design, React-Bootstrap*

Built a full-stack hospital management platform implementing patient records, pharmacy inventory with automatic stock adjustments, billing (HMO support), role-based access control, audit logging, cashier shift management, automated service-based transactions, real-time table/order updates via WebSockets, and department-specific dashboards and reports.

University Student Government Website | *Next.js 14, React, TypeScript, Tailwind CSS, NextAuth.js, MySQL, PM2/Nginx*

Developed a full-stack university student government platform for DLSU (Veritas USG) including an admin dashboard with Role-Based Access Control (RBAC) and permission-based roles, NextAuth.js authentication (credentials + Google OAuth, optional TOTP 2FA) with bcrypt password hashing, announcement and project management with rich-text editing and drag-and-drop image uploads (image optimization/WebP), API endpoints for public content, audit logging and rate limiting for security, middleware-based route protection (temporarily simplified during signin debugging), and deployment tooling using PM2 behind Nginx for production.

GDGOC-DLSU Main Website | *Next.js 15, React 19, TypeScript, Material-UI v6, Firebase, Google Gemini AI*

Developed a comprehensive website for the Google Developer Group on Campus at De La Salle University. This website includes a fully-fledged e-commerce platform with custom payment processing and AI receipt analysis, a member management system, and an organizational information portal to enhance engagement and efficiency.

GDGOC-DLSU Organizational Management Platform | *Next.js, React, TypeScript, Material-UI, Firebase, Tailwind CSS*

Created an organizational management platform (internal tools hub) for Google Developer Groups on Campus, featuring member directory management, order processing with payment verification, and multi-departmental administrative dashboards to streamline internal operations and enhance organizational oversight.

La Salle Debate Society Official Website | *Next.js 15, TypeScript, Tailwind CSS, DaisyUI, React 19*

Designed and implemented an organizational website for the La Salle Debate Society (LSDS) of De La Salle University. This website includes member department management, event showcases with interactive galleries, and a learning resources portal to support the society's activities and outreach.

GDGOC-DLSU Recruitment Website| *React 18, Vite, Firebase, Material-UI, Mantine UI, TailwindCSS*

Built a recruitment and showcase website for Google Developer Student Club De La Salle University, featuring dynamic content management, interactive galleries, and a seamless member onboarding experience to attract and engage potential members.

Retrieval Augmented Generation Chatbot | *Vertex AI, Gemini, Javascript, Html/CSS, Tailwind*

Developed a RAG chatbot using Google Cloud Platform's Vertex AI and Gemini model. This is developed to assist the university's help desk by providing automated response to student inquiries only bound to the knowledge given to it and not hallucinating. This aims to improve the efficiency of concierge/help desk tickets and improve the response times.

RGB to Grayscale Converter | *x86 Assembly, C, NASM, TDM-GCC*

A standard RGB to Grayscale converter linking C and Assembly together where the primary function to convert is implemented in Assembly.

Multiple Web Applications (Frontend & Backend) | *HTML, CSS, JavaScript, React, Firebase (Firestore, Authentication, Hosting), Vercel*