

Nixon A. Lesmana

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EDUCATION

University of California San Diego

Bachelor of Science in Computer Engineering - 3.58 / 4.00 GPA

Expected June 2027

La Jolla, California

SKILLS

Languages: C++, C, Java, Python, JavaScript, TypeScript, MATLAB, LaTeX, SQL

Frameworks/Libraries: React, Next.js, Flask, Tailwind CSS, Prisma, SQLAlchemy, AI SDK

Tools/Technologies: PostgreSQL, MySQL, Git, Docker, REST APIs, Jira, Vim, gdb

RELEVANT EXPERIENCE

Inovasi Daya Solusi (onsite)

July 2025 – September 2025

Quality Assurance Intern

Jakarta, Indonesia

- Improved pre-release API reliability by testing and validating 50+ REST API endpoints across multiple service layers, identifying functional defects before deployment.
- Strengthened backend security coverage by conducting API input-validation testing, uncovering potential SQL injection risks and verifying proper server-side sanitization.
- Reduced average endpoint response times by about 25% in testing environments by analyzing latency and database query patterns and recommending indexing improvements.

Cub Support

May 2024 – January 2025

K-12 STEM Tutor

Cupertino, California

- Provided free weekly tutoring and mentorship to 3 underprivileged students, teaching mathematics and introductory Python programming to strengthen foundational STEM skills.
- Guided students through structured problem-solving exercises and coding challenges, developing computational thinking and improving their confidence in tackling technical concepts.

PERSONAL PROJECTS

Career Copilot (Next.js, React, TypeScript, Tailwind CSS, Prisma, PostgreSQL, Clerk, Gemini API, Zod) | [GitHub](#)

- Built an AI-powered resume tailoring platform that improved application customization by parsing PDF/DOCX resumes, extracting job-posting requirements, and generating structured resume-to-role match analyses.
- Increased the quality and trustworthiness of AI-generated application materials by enforcing Zod-validated outputs for skill-gap analysis, keyword matching, bullet rewrites, and cover-letter generation.
- Streamlined the job application workflow by creating a secure full-stack workspace with Clerk authentication, Prisma/PostgreSQL persistence, usage tracking, and PDF export for tailored resume artifacts.

Note Sharing Platform - NoteX (Next.js, HTML, Tailwind CSS, Python/Flask, MySQL) | [GitHub](#)

- Built a full-stack note-sharing platform that improved content accessibility by enabling users to create, store, and share notes through a secure REST API architecture.
- Strengthened platform security by implementing JWT authentication and password-protected notes, allowing users to manage private content through authenticated sessions.
- Improved note creation and retrieval efficiency by integrating a rich text editor and real-time search functionality for formatted note authoring and faster content discovery.

Web Chat Server (C, HTTP, WebSockets) | [GitHub](#)

- Engineered a real-time chat server that enabled persistent multi-client communication by combining HTTP request handling with WebSocket-based bidirectional messaging.
- Improved server-side concurrency handling by designing connection management and request parsing logic to support simultaneous client sessions and efficient message broadcasting.