Clarissa Aurelia Nahid Saputra

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Experience

RuangGuru

Jun 2025 - Aug 2025

Software Engineering Intern

Jakarta, Indonesia

- Developed interactive animations for learning Data Structure and Algorithms using React.js and GSAP, enhancing user engagement and retention.
- Built a Node.js CLI tool that syncs animation code with voiceovers by generating script timestamps via ElevenLabs API and using prompt-engineered Gemini API calls to adjust animation timing—automating alignment and boosting production efficiency by 90%.

Projects

TripTailor: Al Itinerary Generator (Hackathon) | Next.js, Express.js, LangChain, GroqAPI, SerpAPI, Supabase



- Developed and designed a full-stack AI travel planning web app using Next.js and Express.js, integrating multiple APIs for comprehensive itinerary generation.
- Engineered an intelligent AI agent leveraging LangChain and Groq LLM APIs, integrated with SerpAPI for real-time flight search and hotel data retrieval.
- Built Supabase authentication system with real-time database operations for user management and persistent chat history storage.

Lock your phone in: Avoid phone distractions study web app | React.js, TensorFlow.js, Supabase



- Developed a full-stack productivity web app that leverages TensorFlow.js for real-time object detection, identifying phone usage to promote focused study sessions.
- Engineered a GitHub-style analytics dashboard to visualize user session data, stored and authenticated via Supabase, providing users with insights on their productivity.

Who are you by music | React.js, Gemini API, Supabase, SpotifyAPI



- Built a web app that authenticates users via Supabase and analyzes their Spotify listening data to create personality insights.
- Designed and integrated a prompt-optimized Gemini API pipeline to dynamically generate rich and engaging user descriptions based on Spotify data.

Al Tweet Generator | Next.js, FastAPI, PyDantic, GeminiAPI, SQLite, Docker



- · Engineered an intelligent AI agent using PyDantic that extracts linguistic features from user tweets and generate contextually similar content.
- Built full-stack application with Next.js frontend and Python FastAPI backend, implementing real-time AI agent processing for tweet analysis and content generation workflows.

Education

University of California, San Diego

2025-2029

Incoming Computer Engineering Undergraduate

San Diego, United States

SMAN Unggulan M.H. Thamrin

2022-2025

Valedictorian — National and A Levels curriculum (GPA: 96/100 with A*A*A)

Jakarta, Indonesia

Awards and Activities

Awards: Honorable Mention IPhO, Honorable Mention APhO, Best Theory & Bronze Medal National Science Olympiad (Physics), Beamline for Schools Shortlist, First Place Electrical Engineering Competition Technocorner Activities: Influencer with 140k+ followers in total, Student Council Vice President, Co-founder of Environmental Nonprofit, Founder of Free Tutoring Program, Academy of Champions Gameshow Cast

Technical Skills

Languages: Javascript, Python, C++

Technologies: HTML, CSS, React.js, Next.js, Figma, Flask, Express.js, Mediapipe, TensorFlow, PyTorch, Node.js, MySQL, YOLO, Scikit-learn, Supabase, Firebase, MongoDB, OpenCV, Numpy, Pandas, Matplotlib, Puppeteer, Tailwind, BeautifulSoup, RaspberryPi, Arduino