Vissuta Gunawan Lim

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SUMMARY

Computer Science student specializing in Software Engineering, AI/ML Engineering, and Full-Stack Development. Proven experience building production-ready applications with modern frameworks (React, Next.js, FastAPI, Spring) and deploying scalable solutions on AWS. Expertise in frontend/backend development, AI/ML engineering with LLMs, computer vision, and multi-agent systems. Strong foundation validated through national/international competition wins and practical experience developing applications serving 10,000+ users.

EDUCATION

Bachelor of Computer Science

 $Universitas \ Indonesia$

• 4th semester, Cumulative GPA: 3.84/4.00

WORK EXPERIENCE

Teaching Assistant of Calculus 2

Faculty of Computer Science, Universitas Indonesia

• Assisted lecturer in delivering course content on Improper Integral, Polar Coordinates Calculus, and Multivariate Calculus to 20 undergraduate computer science students.

Software Engineer Intern

Gradient

- Enhancing AI copilot feature by implementing contextual algorithms that increased user engagement by 40% and reduced average task completion time by 25%
- Developing **personalized learning recommendation system** serving **10,000+ active users**, resulting in **30% improvement** in course completion rates and user satisfaction
- Collaborating with **5-person cross-functional team** to deliver **10+ feature updates** and resolved **30+ user-reported issues** within 3-month internship period

LEADERSHIP AND ORGANIZATIONAL EXPERIENCE

Lead of Data Science & Artificial Intelligence SIG	Feb
RISTEK Fasilkom UI	

- Teaching AI/ML concepts and leading group projects utilizing NLP, Computer Vision, and LLMs
- Contributing to research discussions on recent advancements in **data science** and **AI domain**.

Staff of Information Technology Department Jun 2024 – Jan 2025 BEM Fasilkom UI Jun 2024 – Jan 2025

• Contributed to organizational projects applying **front-end development** skills including **CSS**, **JavaScript**, **HTML**, **React.js**, and **Next.js** to enhance faculty's accessibility and publications.

PROJECTS

PerbaikinAja Web App — Docker, AWS, Spring, React

- Led **backend development** for a **full-stack web application** for repair services, designed the **system architecture**, **database design**, and **cloud deployment strategy**.
- Implemented automated CI/CD pipeline using GitHub Actions with automated testing, Docker containerization, and deployment to AWS EC2 instances with automated health checks and rollback mechanisms for zero-downtime deployments, reducing manual deployment time and human error by 50%.

Aug 2024 – Dec 2024

Jul 2025 - Oct 2025

Feb 2025 – Present

March 2025 - May 2025

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Jun 2023 – Jun 2027 (expected)

Multi Agents Crypto Analysis System — LangGraph, LangChain, DeepSeek

July 2025

- Architected **hierarchical multi-agent system** with **5 specialized agents** (financial analyst, risk manager, trading strategy, manager, and critic) delivering comprehensive cryptocurrency market insights
- Implemented LangGraph workflow orchestrating agent interactions and data flow, including automated critique and validation system ensuring output quality, resulting in 40% improvement in investment decision confidence scores

Chaotic Categories Game — FastAPI, Next.js, Modal Labs, Pinecone June 2025 - July 2025

- Engineered a real-time party game with AI-powered scoring system using BERT embeddings and Pinecone vector database to evaluate answer relevance and creativity, processing user inputs asynchronously to maintain sub-second response times
- Implemented serverless GPU-accelerated backend on Modal Labs with FastAPI, achieving 90% cost reduction compared to traditional hosting while maintaining scalability for concurrent users through automatic container orchestration
- Built production-ready full-stack application with Next.js frontend and PostgreSQL/Pinecone dual-database architecture, deploying to Vercel with CI/CD pipeline and comprehensive error handling for zero downtime application.

Gradient Copilot — FastAPI, Next.js, Gemini API, SerpAPI June 2025

- Built full-stack AI learning assistant chatbot with FastAPI backend and Next.js frontend, integrating Google Gemini API for conversational AI, SerpAPI for web search functionality, and image upload/analysis capabilities.
- Deployed scalable solution on cloud platforms (Railway, Vercel) with automated CI/CD pipeline and comprehensive API documentation

HONORS AND AWARDS

- [National, Jan 2025] Finalist of AI Hackathon held by Institut Teknologi Bandung and Telkomsel. Progressed past 330+ teams with TRACE: Traceable Real-time Adaptive Continual Explainable Deep Fake Detection System using Audio Visual Feature Fusion model, implemented with FastAPI web framework and PyTorch deep learning framework for large-scale video data processing.
- [Southeast Asia Regional, Oct 2024] 1st Winner of Data Analysis Competition on Predictive Analysis for Sustainable Energy by Institut Teknologi Sepuluh Nopember. Placed first among 355+ teams across Southeast Asia by implementing data analysis and machine learning solutions, including AutoML modeling and feature engineering techniques for solar power output prediction.
- [International, Aug 2024] 3rd Winner of RISTEK Datathon 2024 by RISTEK Fasilkom UI, a research and tech-related organization at the Faculty of Computer Science, Universitas Indonesia. Placed 3rd among 300+ international teams by developing a Bank Loan Fraud Detection System using Temporal Graph Neural Networks in the qualification phase, then developed an e-commerce Semantic Search Engine using Cross-Encoder architecture and Contrastive Learning in the finals, improving product search relevance for better customer experience.

CERTIFICATIONS & SKILLS

- Skills: Data Science, Artificial Intelligence, Deep Learning, Computer Vision, Natural Language Processing, Data Analysis, Machine Learning, Large Language Model, Python, Pandas, Pytorch, SQL, Information Retrieval, Docker, AWS, Cloud Deployment, Backend Development
- Certifications: Udemy: Deep Learning Course (2025), DataCamp: Data Scientist Track in Python (2025), Datacamp: Associate AI Engineer for Data Scientists Track (2025), Ruangguru Engineering Academy: Mastering AI Bootcamp (2025), Udemy: Ethereum and Solidity Course