

Laksamana Satio Syailendra

satio98@gmail.com | +61 423 406 095 | Melbourne, VIC | [LinkedIn](#) | [Portfolio](#)

Artificial Intelligence Engineer with 3+ years of experience building ETL pipelines, LLM/RAG systems, and machine learning solutions for research, engineering, and enterprise environments. Delivered AI digital-twin simulators, clinical AI prototypes, and production-grade compliance systems using LangChain, FastAPI, Pinecone, and AWS. Skilled at turning complex data and models into scalable, real-world AI applications that create measurable impact.

EDUCATION

Monash University

Expected July 2027

Master of Artificial Intelligence

GPA 4.0/4.0 (High Distinction)

Relevant Courseworks: *Multi Agent Systems, Algorithms and Programming Fundamentals in Python, Machine Learning, Deep Learning*

Institut Teknologi Bandung

July 2022

Bachelor of Science

Graduated from Indonesia's top engineering university with strong foundations in modelling, computation, numerical analysis, and data-driven problem solving

Microsoft Certified: Azure AI Fundamentals (AI-900)

Credential ID: 4E7EE6B385E816AA

December 2025

Demonstrate fundamental AI concepts related to the development of software and services of Microsoft Azure to create AI solutions.

WORK EXPERIENCE

Monash Deepneuron

Aug 2025 - Present

Artificial Intelligence Engineer - Full-time

- Built Python-based ETL workflows that improved experiment analysis speed by 60%, producing clear insights for clinicians and AI researchers.
- Developed digital twin simulator for autonomous laparoscopic surgery using Reinforcement Learning which creates foundational platform for next-generation surgical AI research

PT AVS Simulator

May 2023 - June 2025

Software Engineer - Full-Time

- Designed and deployed a production-grade Legal RAG System for compliance, safety, and certifications and reduced compliance research time from 3 hours to under 30 seconds for across engineering and compliance teams.
- Built end-to-end pipeline using LangChain, FastAPI, Pinecone Vector Database, OpenAI API LLM and deployed using AWS including CI/CD workflows via GitHub Actions and increased internal audit accuracy by 40%.
- Led cross-functional teams consisting of software, legal and operations team to design digital twin powering Indonesia's national high-speed rail simulator, improving maintainability by 30% and enabling enterprise-scale training operations used by hundreds of operators.

Upwork

Jun 2020 - May 2023

AI/ML Engineer - Remote

- Developed analysis tool for customer reviews for Garuda Indonesia, Rank 1 Indonesia Airline, by fine-tuning BERT and deploying via Flask on AWS (EC2/S3) delivering real-time insights across 5000+ customer reviews.
- Orchestrated ETL pipeline to process structured/unstructured data and reduce dataset preparation time by 40%.
- Developed Python-based analytics pipelines that processed and modelled customer and sales data, helping clients improve satisfaction by 20% and monthly sales by 14%.

Higertech

Oct 2022 – Apr 2023

Software Engineer - Full-time

- Automated Python ETL workflows for 25+ environmental sensors across West Java, reducing manual processing time by 30%.
- Built automated Python ETL pipelines and risk-analysis scripts powering water-level and rainfall forecasting tools used by BMKG, Indonesia's official meteorological authority

PROJECTS

AI Medical Scribing Assistant — NextGenAI Hackathon 2025

- Developed an AI-powered medical scribing assistant using speech-to-text, LLMs, and domain-specific prompt engineering to help clinicians generate accurate consultation notes in real time.
- Built a prototype combining Whisper, OpenAI and a structured note template, reducing manual documentation effort for clinicians by an estimated 50%.
- Collaborated in a cross-disciplinary team to design user workflows aligned with clinical requirements for accuracy and safety.

VOLUNTEERS

Rakamin Data Science

Sep 2024 - Present

Digital Transformation Consultant, Core Team

- Created the logo, branding, and publication materials of the non-profit organisation.
- Responsible for interacting with clients and gathering requirements, exhibiting effective stakeholder communication, business process modelling skills, and technical expertise.
- Execute projects for cybersecurity education, tech mentorship, and empowerment of not-for-profits.

ITB Consultants for Organization Development and Empowerment

Sep 2020 - Jun 2024

Project Head, Information Process Manager, OrgDev Consultant

- Led multiple projects and teams that impacted local and nationwide stakeholders.
- Provided consultancy services to over 60 youth organisations nationwide.
- Developed software tools and streamlined systems such as link shortening and Zoom reservation.

SKILLS & INTERESTS

Professional: Project management, Stakeholder engagement, Problem-solving, Strategic planning, Rapid learning, Resilience, Leadership

Technical: Python, FastAPI, Flask, LangChain, Pinecone, OpenAI APIs, SQL, NoSQL, Java, JavaScript, R, Google Sheets, Excel, Power Query, Power BI, Tableau, Figma, Agile, Scrum, ITIL, Docker, Azure

Interests: Urban Development, Gender Studies, Philosophy, Education, Photography, Mountaineering

REFERENCES

Referees are available upon requests.