

Vico Winner Sebastian Aritonang

AI & Automation Engineer | Software Engineer | Cloud & DevOps

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Summary

Information Systems undergraduate (7th semester) at the University of Indonesia and co-founder of an AI automation startup. I build production-grade agentic AI and automation systems that remove operational and workflow bottlenecks by designing LLM-powered agent orchestration, high-concurrency Go microservices, and cloud-native infrastructure on GCP with Docker. Comfortable across the stack (Next.js/React front ends, Go/Python back ends) with hands-on data analysis and machine-learning experience. Seeking an internship in **AI automation**, **DevOps**, or **software engineering**.

Technical Skills

- **AI & Automation:** Agentic AI & LLM application development, workflow orchestration (n8n), Retrieval-Augmented Generation (RAG), vector databases, LLM integration & evaluation, Hugging Face, prompt engineering
- **Backend:** Go (high-concurrency microservices), REST API architecture, system integration, distributed systems & concurrency design
- **Cloud & DevOps:** Google Cloud Platform (GCP), AWS (Lambda, Step Functions, EventBridge), Docker & containerization, CI/CD, Vercel, serverless & cloud-native deployment
- **Frontend:** Next.js, React, TypeScript, Tailwind CSS
- **Data:** Data analysis, machine learning, PostgreSQL, Supabase
- **Languages:** Go, Python, TypeScript/JavaScript, Java, Dart, C

Experience

Co-Founder | Avagenc

Feb 2025 – Present

AI Automation Startup (Self-employed)

Depok, Indonesia

- Co-founded [Avagenc](#), building agentic AI systems that automate repetitive and complex business workflows for real operational use cases.
- Lead end-to-end product engineering across the web platform and Android client, plus the underlying AI agent orchestration layer.
- Design and deploy LLM-powered agents that integrate workflow automation, vector databases, and third-party APIs into reliable, reusable services.
- Own deployment and DevOps: containerized services with Docker on cloud-native infrastructure, with a focus on maintainability and scalability.

IT Support (Part-time) | Bimbel Wangsit Om Jer

Dec 2025 – Apr 2026

Part-time

On-site

- Provided monthly on-site IT support for the tuition center's bootcamps and tryout exams.
- Ensured exam readiness and resolved technical issues before and during exams (including exam-platform and site errors) to keep sessions running without interruption.

LLM Evaluation Assistant | Freelance

Apr 2025 – May 2025

Freelance (Self-employed)

Remote

- Evaluated a mathematical LLM across 200 questions, assessing answer correctness, reasoning validity,

and potential hallucinations.

- Delivered structured evaluation reports to support further model development and fine-tuning decisions.

Manager | UI DigiTalk

Apr 2024 – Oct 2024

Contract

Depok, Indonesia

- Managed the event subcommittee for UI Digicamp, curating and organizing the technical subtopics presented.
- Coordinated the team and timelines applying practical project-management practices.

Field Staff | Pesta Rakyat Komputer

Jan 2024 – Apr 2024

Contract

Depok, Indonesia

- Managed on-site technical operations for a large faculty-wide computing event.

Secretary | Natal KMK Teknik 2022

Nov 2022 – Jan 2023

Contract

Depok, Indonesia

- Handled proposals and event documentation submitted to the faculty; supported cross-team collaboration.

Projects

Datafact | AI Survey-Response Engine (Serverless)

2025 – 2026

Live Product

AWS Lambda, Step Functions, EventBridge, Generative AI

- Built an AI service that generates realistic, persona-targeted survey responses for Google Forms at scale, applying AI engineering to turn a chosen persona and a form into coherent, human-like answers.
- Engineered a fully serverless AWS backend (Lambda, Step Functions, API Gateway HTTP APIs, EventBridge Scheduler) for elastic, event-driven, no-ops execution. Live at datafact.site.

NusaVerify | AI Hoax-Detection Engine

2026

Bank Indonesia Hackathon

Next.js, LLM, Information Retrieval

- Developed an AI fact-checker that searches across multiple sources and computes a hoax/validity probability via a weighted-average validation algorithm.
- Visualized the AI's full reasoning chain as an animated, interactive mind-map for transparent, explainable verdicts. Live at nusaverify-web.vercel.app.

Optimizing Robot Tutor Strategies | Reinforcement Learning Research

2026

Academic Project, University of Indonesia

Python, Gymnasium, Stable-Baselines3

- Formalized the Robot Tutor problem as a 1,440-state Markov Decision Process (24-hour clock, proficiency, fatigue, and engagement) and built **RobotTutor-v2**, a reusable Gymnasium environment compatible with Stable-Baselines3.
- Trained and benchmarked four deep RL algorithms (DQN, PPO, TRPO, SAC) across independent seeds; Soft Actor-Critic reached the best policy with a 100% expert-proficiency rate, far surpassing random and fixed-schedule baselines.

HandlerIndonesia | Export-Facilitation Platform for MSMEs

2025

Top 50 Finalist, 1000x Innovation Challenge

React / Next.js, Vercel

- Built an IT-based platform empowering Indonesian MSMEs (UMKM) to expand into global markets through export facilitation, bridging local producers and international demand with digital tools and

guidance.

- Selected as a **Top 50 Finalist** (Marvin Foundation × Universitas Indonesia × DSX Ventures). Live at handlerindonesia.vercel.app.

Vicoworks | Interactive Engineering Portfolio

2025 – 2026

Personal Project

Next.js, TypeScript, Supabase

- Designed and shipped an animated, database-driven portfolio (vicoworks.com) with a Supabase/PostgreSQL backend and server-side rendering. Also authored **gmail-sender** (Go email-automation service) and concurrency simulations in Python.

Education

University of Indonesia

Aug 2023 – Jul 2027 (Expected)

B.Sc. in Information Systems

Depok, Indonesia

Previously enrolled in Mechanical Engineering at the University of Indonesia (Aug 2022 to Jun 2023) before transferring to Information Systems.

Certifications, Competitions & Awards

- **Top 50 Finalist, 1000x Innovation Challenge**, Marvin Foundation (with Universitas Indonesia & DSX Ventures). Feb 2025.
- **GEMASTIK XVIII, ICT Business Development Division (Divisi Pengembangan Bisnis TIK)**, National Student ICT Competition. Sep 2025. Credential ID 962/KMH01/KMH/2025.
- **Falcon × Qatar Airways AI Infographic Competition**, Faculty of Information Technology, Universitas Pelita Harapan (UPH). Nov 2024. Credential ID 016/COM/FP14/FIT-UPH/XII/2024. (Data Analysis, Machine Learning)

Volunteering

Student Volunteer & Scholarship Awardee | Wahana Visi Indonesia

Sep 2024 – Jun 2025

Civil Rights & Social Action

North Jakarta, Indonesia

- Volunteer teaching for vocational high-school students in North Jakarta as part of a community-empowerment program.