

SAYYIDAH FATIMAH AZZAHRA

Malang, Indonesia | sfatimable@gmail.com | [Portfolio](#) | [LinkedIn](#) | [Github](#) | [Achievements](#)

A result-driven **AI/ML Engineer** and **iOS Developer** with expertise in **large language models**, **computer vision**, and **end-to-end ML pipelines**. Delivered **5+ AI solutions** including agentic systems, RAG architectures, and real-time inference pipelines. Led **3+ technical teams**, earned **10+ national/international awards** in tech competitions, and spoke in **3+ offline and online events**. Passionate on building intelligent systems with measurable business impact.

PROFESSIONAL EXPERIENCE

iOS Developer

South Tangerang, Indonesia

Apple Developer Academy @ Binus Tangerang

Mar 2026 – Present

- Built Remain, an **immersive macOS horror typing game** with real-time speed and accuracy tracking
- Created Croquet, an **iOS crochet project tracker** to help crochet makers track rows, detect stitches from photos
- Developed Cubby, an **iPadOS interactive story game** that teaches children about personal boundaries
- Worked on Gowes, an **iOS cycling app** that recommends routes based on predicted NO₂ exposure and travel time

AI/ML Research Engineer (Part-time, Hybrid)

Malang, Indonesia

Engagement Research @ FILKOM

Sep 2025 – Present

- Developed **multimodal engagement detection system** fusing gait analysis and facial expression recognition for behavioral analytics research in **Jawa Timur Park 2 Malang**
- Implementing state-of-the-art **computer vision models** including **YOLOv8n-pose**, **MediaPipe**, **OpenPose**, and **custom CNN** models for real-time pose estimation and action recognition

AI Engineer (Contract, Remote)

Malang, Indonesia

Fiona AI

Sep 2025 – Mar 2026

- Developed **AI Consulting SaaS platform** for UMKM in partnership with **Ramir Consulting Indonesia**
- Designing and implementing a **multi-agentic AI system** using **LangChain** and **LangGraph** for autonomous business consulting workflows
- Successfully built document ingestion and **RAG pipeline** with **OCR** capabilities, **ChromaDB** and **OpenAI embeddings** for 7+ core accounting modules in total, generating balanced journal entries with proper debit/credit validation

Lead AI Engineer (Contract, Remote)

Malang, Indonesia

Vocalize

Jul 2025 – Jan 2026

- Leading development of **AI-powered automatic mixing and mastering platform** in partnership with Boam and Share Music from Korea, successfully achieved **<3 minute processing time** for raw audio to production-ready tracks
- Implemented voice conversion models using **Retrieval-based Voice Conversion** and **Zero-shot Voice Conversion**
- Implemented **audio signal processing pipelines** using deep learning models for source separation, EQ optimization, dynamic range compression, and spatial audio processing
- Optimized model inference for through code optimization and GPU acceleration, coordinated with the web development team on **model integration** and **deployment pipelines**

EDUCATION

Bachelor of Computer Science – Major in Informatics Engineering

Malang, Indonesia

Universitas Brawijaya

Aug 2023 – Jun 2027 (Expected)

- **Beasiswa Unggulan Awardees (10.4% acceptance rate)** – Full tuition scholarship by Kemendikdasmen for leadership potential and academic excellence
- **MC, Speaker & Facilitator** – MC at PKKMB FILKOM UB 2024, Speaker at INTRIVIA FILKOM UB 2025, Awardee Facilitator at Schotival FILKOM UB 2025, Speaker at Apple Academy x BCC 2026, Speaker at Scholarship Event by HMDTIF FILKOM UB 2025

LEADERSHIP & COMMUNITY

Head of Data Science Department

Malang, Indonesia

Basic Computing Community (BCC) Universitas Brawijaya

Jan 2025 – Dec 2025

- Led **30+ data scientists** in conducting **10+ technical workshops and discussion** on ML/DL fundamentals and recent innovations
- Guiding development of **2 open-source ML libraries**: [Leksara](#) (an Indonesian NLP library) and [Noventis](#) (a data preprocessing library) and organized Data Science Mini Bootcamp, a **3-day data science mini bootcamp for 100+ participants**
- Achieved **Best Staff** title for exceptional and active participation across all Data Science Department internal and external activities and **1st Winner of BCC Internal Data Science Competition on Kaggle** with team for best implementation for the given problem [\[Best Staff Link\]](#) [\[Winner Certificate\]](#)

R&D and Infrastructure Division Member

Malang, Indonesia

Intelligent Systems Laboratory @ FILKOM

Aug 2024 – Present

- Scraped and curated research publication dataset from **laboratory's 25 lecturers** using Selenium and BeautifulSoup for laboratory knowledge management [\[Link to dataset\]](#)
- Actively participated in **3+ workshops**, gaining foundational knowledge in deep learning fundamentals such as RNN, attention mechanism, backpropagation, etc.
- Co-organized Neural Talk sharing sessions from **laboratory's 25 lecturers for 150+ participants**

AWARDS & RECOGNITION

3rd Winner of Hackathon Hackvidia Arkavidia ITB 2026 (National)

Institut Teknologi Bandung

- Achieved 3rd winner from 100+ participants by developing a **multi-task vision-language image segmentation system** and generating VLM dataset using knowledge distillation and CoT reasoning.

Best MLOps Mentee of SISTECH 2025 (National)

Universitas Indonesia

- Achieved Best MLOps Mentee from 800+ registrants by developing career matching feature using **content-based filtering** with **96.7% accuracy**, course recommendation with **35% relevance score**, deployed 24 API ML endpoints [\[Certificate\]](#) [\[Project Presentation\]](#) [\[Github\]](#)

2nd Winner of Hackathon ElevAlte Microsoft Indonesia Hub UB 2025 (National)

Universitas Brawijaya

- Achieved 2nd winner from 180+ participants spread nation-wide by developing an AI-powered social media monitoring system with **topic modeling and sentiment analysis utilizing Azure and OpenAI API** [\[Certificate\]](#)

3rd Runner-up FIT Data Science Competition 2025 (International)

Universitas Kristen Satya Wacana

- Placed 4th among 90+ global participants by developing deep learning solutions for environmental problems using **satellite imagery processing** [\[Certificate\]](#)

3rd Runner-up Data Analysis Competition 2024 (International)

Institut Teknologi Sepuluh Nopember

- Placed 4th among 135+ global participants by developing machine learning analysis and solutions for the given cases regarding **how to improve power plant efficiencies** [\[Certificate\]](#)

1st Winner of UI/UX PINGFEST 2025

Universitas Sebelas Maret

3rd Winner of UI/UX INVENTION 2025

Universitas Udayana

Top 10 of HACKFEST Google 2024

Google Developers Student Clubs Indonesia

1st Winner of BCC Internal Data Science Competition on Kaggle 2024

Basic Computing Community

2nd Winner of NCH Data Science Essay Competition Awards 2022

Northeastern University

3rd Winner of JEF Europe 2021 Global Solutions for Global Problems Essay Competition

JEF Europe

CERTIFICATIONS

- **Associate Data Scientist** [\[Certificate\]](#) BNSP (Badan Nasional Sertifikasi Profesi)
- **Research Assistant** [\[Certificate\]](#) Alfred Deakin Institute for Citizenship and Globalisation, Deakin University
- **English Certification (603/677)** [\[Certificate\]](#) BEPT 2025