

# Faa'iz Haikal Hilmi

Final Year Student of Computer Science · Institut Teknologi Sepuluh Nopember

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## Summary

Highly motivated and award-winning Computer Science student with hands-on experience in full-stack development and robotics. Proven ability to lead and collaborate in cross-functional projects, from AI-powered systems to web and mobile apps.

## Experience

### ICHIRO ITS Robotics Team

Surabaya, Indonesia

PROGRAMMER

December 2022 - July 2025

- Developed a microservice framework comprising 13 services, enabling humanoid robot to compete in sport competitions, securing 1<sup>st</sup> place at KRI 2024 and 2<sup>nd</sup> place at KRI 2023 national competition. Additionally, secured 1<sup>st</sup> place at RoboCup 2024 Technical Challenge and won 23 awards at FIRA HuroCup 2023 international competition.
- Developed a web-based robot control interface using React.js and gRPC for client-server communication, ensuring real-time data from the microservice program. Enabled team members to fine-tune robot's walking, create robot's motion, also monitor robot's vision process.
- Conducted research and implementation of Inverse Perspective Mapping, enabling humanoid robot to calculate distance of detected objects relative to robot's position.

### SDPPI Kominfo

Remote Work

AI SOFTWARE DEVELOPER

August 2024 - January 2025

- Developed and integrated a face recognition and text-to-speech system for RAISA, an assistant robot providing customer services, enabling it to identify and greet returning customers autonomously.
- Designed and built a web-based customer face registration portal using React.js (frontend), Node.js (backend), and MongoDB (database), allowing users to register their facial data. Streamlined customer interactions by eliminating the need to repeatedly fill in personal information on subsequent visits.

## Projects

### Mobile Application Project (Spendiary)

Surabaya, Indonesia

FULL-STACK DEVELOPER

January 2025 - Present

- Developed Spendriary, a cross-platform mobile application using Flutter, enabling users to monitor expenses and incomes efficiently.
- Built and deployed a Go Fiber backend with a PostgreSQL database, implementing secure user authentication with JWT access and refresh tokens to ensure session persistence and data protection.

### Mobile Application Project (Osingly)

Surabaya, Indonesia

FULL-STACK DEVELOPER

February 2025 - June 2025

- Developed Osingly, an android application using Kotlin, to translate between Osing, a local language from Banyuwangi, and Indonesian, supporting both text and image translation.
- Trained custom neural machine translation models using PyTorch, effectively handling bidirectional translation tasks with 96% BLEU score.
- Deployed the models using FastAPI server, allowing real-time translation capabilities for the mobile app.

### Mobile Application Project (Planthis)

Surabaya, Indonesia

FULL-STACK DEVELOPER

February 2025 - June 2025

- Developed Planthis, a cross-platform mobile application using Flutter, allowing users to receive smart tree recommendations based on pinned map locations.
- Scraped and structured data for 232 tree species from World Agroforestry using Python, extracting names, biophysical limits, and suitability metadata.
- Built and deployed a FastAPI backend with Firebase Authentication and Google Sign-In, supporting real-time recommendations and secure user access.

### Web Application Project (KickVerse)

Surabaya, Indonesia

FULL-STACK DEVELOPER

September 2024 - December 2024

- Developed KickVerse, an e-commerce web platform using Laravel, providing interface for users to buy and sell various types of shoes.
- Implemented an image-based search and classification system by training machine learning models via Roboflow, achieving 91% accuracy across 7 shoe categories: Basket, Boots, Casual, Flat Shoes, Football, Formal, Heels, Running Shoes.

## Education

### Institut Teknologi Sepuluh Nopember

Surabaya, Indonesia

COMPUTER SCIENCE

2022 - Present

- GPA: 3.80 / 4.00
- ITS English as Foreign Language test score: 534

## Skills

**Language** : Go · Dart · Python · Java · JavaScript · C/C++

**Framework** : Go Fiber · Flutter · FastAPI · Flask · React.js · Node.js · Laravel

**Database** : PostgreSQL · MySQL · MongoDB

**Tech** : Git · Firebase · Docker · JWT · Selenium · gRPC · Elasticsearch · Kafka