

# WIRIDLANGIT SULUH JIWANGGA

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Information Technology graduate from Institut Teknologi Sepuluh Nopember (ITS) with experience in mobile development, computer vision, and Internet of Things. Skilled in building end-to-end applications and intelligent systems using Kotlin, Python, and YOLO, with hands-on experience deploying real-time solutions on edge devices such as Raspberry Pi.

## EDUCATION

**Bachelor of Information Technology GPA: 3.74 / 4.00**

September 2021 – July 2025

Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia

## SKILLS

**Programming Languages:** Python, C/C++, Kotlin, JavaScript

**Frameworks & Libraries:** Flutter, OpenCV, YOLOv8/v11, Firebase, Streamlit

**Tools & Technologies:** Git, Linux, Computer Vision, Deep Learning, Edge AI, Real-time Inference

**Hardware & Data:** Raspberry Pi, Hailo AI Kit, Arduino-compatible boards

## WORK EXPERIENCE

**System Development Intern, PT. Bank Negara Indonesia (Persero) Tbk.**

September 2024 – January 2025

- Developed and deployed a Streamlit-based dashboard website to visualize and process company data.
- Built an AI chatbot to provide instant answers related to company regulations and policies.

**Android Developer Intern, Jakarta Smart City**

July 2024 – August 2024

- Created a digital transformation solution by converting a web-based system into a mobile application.

**Mobile Development Cohort, Bangkit Academy led by Google, Tokopedia, Gojek, & Traveloka**

February 2024 – July 2024

- Developed practical skills in creating Android application using Kotlin.
- Making an AI-based application for trash detection.

## RESEARCH EXPERIENCE

**Violence and Sharp Object Detection, Institut Teknologi Sepuluh Nopember**

March 2025 – June 2025

- Developed a real-time computer vision system to detect physical violence and sharp objects in indoor public spaces using YOLOv11.
- Deployed detection pipeline on Raspberry Pi 5 integrated with the Hailo AI Kit for edge inference from USB webcam or CCTV input.

## PROJECTS

**Trash Detection Application**

June 2024 – July 2024

- Developed a machine learning-based application to detect trash and provide contextual information about detected waste.

**Skin Cancer Detection Application**

March 2024 – June 2024

- Developed a machine learning-based application to detect skin cancer and provide binary predictions (Cancer / Not Cancer) along with confidence scores.

**Smart Access Control System for Campus Gates**

May 2023 – June 2023

- Developed an electronic gate control system at ITS that opens and closes using student ID card taps.
- Built with ESP32, PN532 RFID module, and buzzer for authentication and feedback.

**IoT-Based Smart Laboratory Monitoring System**

December 2022 – March 2023

- Integrated IoT devices as core infrastructure to enhance functionality, automation, and efficiency in laboratory operations.
- Monitored power consumption using PZEM-004T sensors and smart plugs, integrated with Home Assistant for centralized control and real-time energy tracking.

## ADDITIONAL EXPERIENCE

- Earned certifications in Android Development (Dicoding) and Smart Cities – Management of Smart Urban Infrastructures (EPFL).
- Served as a teaching assistant for multiple university courses, including Mobile Development and Data Structures.
- Led the Media & Information Division of the IT ITS Student Association, managing social media, organizational branding, and effective communication with internal and external stakeholders.