

SUMMARY

Passionate Master's student specializing in 5GC and O-RAN systems with hands-on experience in private 5G network design, IoT integration, and AI-enhanced telecom architectures. Skilled in deploying open-source platforms such as OpenAirInterface, Free5GC, Open5gs and UERANSIM. Eager to contribute to next-generation communication technologies in a dynamic and innovative environment.

SELECTED PROJECTS

ORAN-Based Access Gateway Function (AGF)

Simulated a Layer 2/3 gateway for O-RAN-based private 5G using open-source stack.

- Tools: OpenAirInterface, UERANSIM, Open5GS, xl2tpd, rpppoe, dhcp, strongswan
- Outcome: Established end-to-end 5G user plane with tunneled data sessions and flexible IP assignment.

Face Recognition IoT Project

Developed face recognition capability using ESP32-CAM with RTSP streaming.

- Tools: PlatformIO, ESP32CAM, OpenCV integration potential
- Outcome: Enabled low-cost, embedded AI-powered surveillance feature.

Power Relay Bluetooth Control

Built a Bluetooth-based relay control system for smart home applications using Arduino.

- Tools: Arduino IDE, C, HC-04 Bluetooth module, 2-Channel relay
- Outcome: Successfully demonstrated wireless switching of household appliances.

EDUCATION

Nasional Taiwan University of Science and Technology

Electronic and Computer Engineering
2023 – 2025

The research topic is about wireless communication especially on 5GC and O-RAN system.

University of Jember

Bachelor's Degree in Electrical Engineering
2018 – 2022

The research title is “Energy Consumption Analysis of Wireless Sensor Network (WSN) for Structural Health Monitoring System (SHMS) Based on Vibration Sensor in Building.

Student Exchange

Permata Sakti Programe, Universitas Syiah Kuala
Permata Sakti Programe, Bandung Institute of Technology
Permata Sakti Programe, Kalimantan Institute of Technology
2021

CAREER OBJECTIVE

Seeking a role as a Network Engineer or R&D Specialist in the field of advanced wireless communication, where I can apply my knowledge of 5GC, O-RAN, and network automation to support next-generation connectivity solutions.

GitHub: <https://github.com/saffanazyano7>

PROFESSIONAL EXPERIENCE

Internship

Network & Enterprise Solution, G Reign HTC | 2024
the Network & IS Operation Unit Witel Jember, Telkom | 2021

Assistant Laboratory

Basic Electrical Laboratory, University of Jember | 2019 – 2022

COURSE

Wireless Communication

NTUST | Aug 2023 – Jan 2024

Cloud and Fog Computing in the Internet of Things

NTUST | Feb 2023 – Jun 2023

Advanced Computer Architecture

NTUST | Aug 2023 – Jan 2024

LANGUAGES & SOFT SKILLS

Languages: Bahasa Indonesia (Native), English (TOEFL 517)

SKILLS

- C/C++
- Python
- Go
- HTML, CSS, JS
- Wireshark
- Docker
- Git
- Oracle VirtualBox
- Arduino IDE
- AWS
- Ubuntu & Linux



Personal Portfolio