

Rama Rahardi

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Education

Institut Teknologi Bandung, Bandung, Indonesia Aug 2017 – Jul 2021
BSc in Telecommunication Engineering, School of Electrical Engineering & Informatics. *GPA: 3.75 out of 4.00*
• Final Project: *Development of Antenna Array with Simple Beamforming Capability for DoA Estimation*
• Courses: Computer Networks, Software Engineering, AI & Data Analytics, RF Electronics, Telecommunications, Embedded System

Professional Experience

Software Engineer (IoT & Telematics) Aug 2022 – present
CAD-IT Consultants, Bandung, Indonesia
• Lead a team that develops and delivers comprehensive vehicle telematics products for clients
• Develop web-based industrial IoT solutions for fleet management and industrial asset management

Software Engineer Dec 2021 – Jul 2022
Mobileum, Jakarta, Indonesia
• Developed features for mobile traffic analytics software based on client requirements
• Enriched a database of unique internet traffic flows classification for communication service providers

Research & Development Engineer Jul 2021 – Nov 2021
LAPI ITB, Bandung, Indonesia
• Led the primary surveillance radar (PSR) antenna development team in the national GCI Radar R&D project initiated by the Indonesian Ministry of Defence and produced antenna array with novel design
• Conducted RF high-power amplifier (HPA) initial development, focusing on component evaluation, circuit design, and simulation

Satellite Payload Engineer Intern Jun 2020 – Jul 2020
Bank Rakyat Indonesia, Jakarta, Indonesia
• Performed cross-polarisation isolation (CPI) measurement and alignment on hundreds of VSAT terminals across Indonesia
• Studied the fundamental concepts of satellite communications system and operations of communications satellite payload

Skills

Programming	JavaScript (React & Vue), Go, Rust, Python, C, C++, Java, Matlab
IT	Cloud services, CI/CD, Git, Docker, Databases (Postgres, SQL Server, MongoDB), Linux, TCP/IP networking
Engineering	Electronics, PCB Design (Kicad), EM Simulation (CST Studio, Ansys HFSS, Keysight ADS)
Languages	Indonesian (native), English (fluent), German (intermediate), Swedish (beginner), Japanese (beginner)

Activities

Bengkel Radio IMT ‘Signum’ ITB Jan 2019 – Jul 2021
• Involved in various projects related to telecommunications and internet of things
• Chairperson of Bengkel Radio (Apr 2020 – Apr 2021)

Aksantara ITB Jan 2018 – Dec 2020
• Conducted research projects to further improve UAV telemetry systems & technology and published two research papers
• Participated in one national UAV competition and two international UAV competitions and won two awards

Honors and Awards

3rd place , PLAiDEA AI Ideas Development Contest	2020
2nd place , Fixed Wing UAV, KRTI (Indonesia Aerial Robot Contest)	2018
2nd place , Fixed Wing UAV, TUBITAK UAV Competition	2018

Projects

• Personal Vehicle Management (2024)	• Smart Black Soldier Fly Farmer (2021)	• ITB Rector Election Data Analysis (2020)
• IoT Home Lab (2023)	• WLAN & LTE UAV Telemetry (2020)	• Smart Sous Vide Cooker (2019)
• Personal Website (2022)	• LoRa-based Telemetry Protocol (2020)	• Smart Shoe Dryer (2018)

Publications

Development of An Array of Patch Antennas for Straightforward Beamforming Application
Rama Rahardi, Agus Dwi Prasetyo, Rezki Benedikto Renwarin, Achmad Munir
2023 Workshop on Microwave Theory and Technology in Wireless Communications (MTTW), 2023.

Meander Line-based Wilkinson Power Divider for Unmanned Aerial Vehicle Application
Rama Rahardi, Muhammad Rizqi, William D. Lukito, Rhenetou Virginio, Muhammad Hilmi, Achmad Munir
2020 IEEE International Conference on Communication, Networks and Satellite (Comnetsat), 2020.

Compact Dipole Antenna Based on Meander Line Structure for Unmanned Aerial Vehicle Application
Rama Rahardi, Muhammad Rizqi, William D. Lukito, Muhammad Hilmi, Rhenetou Virginio, Achmad Munir
2020 IEEE International Conference on Communication, Networks and Satellite (Comnetsat), 2020.