

# Rama Rahardi

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Updated October 22<sup>th</sup>, 2024

## 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, AI & Data Analytics, RF Electronics, Wireless Communications, Embedded Systems

## Professional Experience

**IoT Application Engineer** Aug 2022 – present  
CADIT Consultants, Bandung, Indonesia  
• Lead a team that develops comprehensive vehicle telematics products and solutions for clients  
• Develop Transportation Management System (TMS) for complete logistics operations & intelligence solution  
• Developed low-latency and high-volume IoT gateway for fleet telematics data ingestion & processing, aiming for sub-second latency with hundreds of connected vehicles  
• Developed features for industrial asset data connector module  
• Assist presales activities related to vehicle telematics & wireless networking solutions  
• Stacks: JavaScript (React), Go, Java, Python, ThingWorx, Postgres, SQL Server, Redis, NATS, Azure Cloud

**Discovery Software Engineer** Dec 2021 – Jul 2022  
Mobileum, Jakarta, Indonesia  
• Developed network signatures classification features for mobile traffic analytics software. Resolved customer requests within three days  
• Enriched a database of categorized domains for communication service providers. Added 50-100 domains daily  
• Stacks: Python, Wireshark

**Research & Development Engineer** Jul 2021 – Nov 2021  
LAPI ITB, Bandung, Indonesia  
• Led the primary surveillance radar antenna development team in Indonesian Ministry of Defense GCI Radar R&D project  
• Produced antenna array with novel design, aiming for 200+ km detection range with phased array for beamforming capability  
• Conducted RF high-power amplifier initial development for radar detection, focusing on component evaluation and circuit design

**Satellite Payload Engineer Intern** Jun 2020 – Jul 2020  
Bank Rakyat Indonesia, Jakarta, Indonesia  
• Performed cross-polarisation isolation measurement and alignment on hundreds of VSAT terminals across Indonesia. Resolved CPI alignment requests within one shift  
• Performed experiments to streamline CPI alignment process using field tools  
• Studied the fundamental concepts of satellite communications system and operations of communications satellite payload

## Activities

**Bengkel Radio IMT ‘Signum’ ITB** Jan 2019 – Jul 2021  
• Led the organization, oversaw daily activities and recruited new members  
• Developed automatic gate & counter for black soldier fly farming  
• Performed feasibility study for low-cost internet in rural areas using analog satellite radio connectivity

**Aksantara ITB** Jan 2018 – Jul 2021  
• Participated in UAV competitions and conducted research projects focusing on telemetry technology. Won awards on national and international UAV competitions  
• Developed long-range, high bandwidth, and low-latency UAV telemetry products featuring Wi-Fi & LTE connectivity  
• Developed autonomous control systems for payload delivery quadcopter UAV  
• Developed antennas, RF components, and antenna tracker for long-range mapping UAV  
• Stacks: C++ (ROS, OpenCV, Arduino)

## Projects

- |                                      |                                     |                             |
|--------------------------------------|-------------------------------------|-----------------------------|
| • Autonomous Mobile Robot (2024)     | • Urban Farming AI Assistant (2020) | • Wake Up Alarm Bell (2018) |
| • AI Digital Video Recorder (2024)   | • Smart Sous Vide Cooker (2019)     | • Smart Shoe Dryer (2018)   |
| • Personal Vehicle Management (2024) | • RFID Attendance Tracker (2018)    | • Smart Water Tap (2018)    |

## Skills

<b>Programming</b>	JavaScript, Go, Rust, Python, C, C++, Java
<b>IT</b>	Azure Cloud, CI/CD, Git, Docker, SQL Databases, Message Queuing, Linux, TCP/IP networking
<b>Engineering</b>	Electronics, PCB Design, Electromagnetic Simulation
<b>Languages</b>	Indonesian (native), English (fluent), German (intermediate)