CURRICULUM VITAE

Address : Jln. Kuningan 10 no. 6
Antapani – Bandung
40291
Phone : +62 – 896 5625 1646

Software Engineer at PT. Satunol MikroSistem | Go & Python | AI Integration Specialist | Mobile Developer | Fullstack Developer | Software Engineer

Name	Royyan Wibisono
Email	royyanwibisono@gmail.com
Religion	Islam
Sex	Male
Height / Weight	174 cm / 85 Kg
GPA	3.18

About Me

I am a passionate software developer from Bandung - Indonesia with expertise in Go and Python programming. I love working with real-time communication technologies like WebSocket and WebRTC to create seamless and responsive systems. My main strength is designing and implementing complex software solutions. Lately, I have been diving into the world of LangChain and LangGraph, where I integrate real-world data from sensors, databases, and existing functions into large language models (LLM) like OpenAI, Deepseek, or QwenAI. This journey is very exciting and full of new possibilities for AI-driven applications. I am always eager to learn and explore new technologies!

Technical Skill

1. Programming Languages: Go, Python, Javascript, TypeScript, HTML/CSS, C# .NET, C/C++ Arduino
2. Framework: LangGraph, LangChain, Flutter, NextJs, Python Bottle and Flask, Gin, Go Fiber, ReactJs
3. Databases: MySQL, MongoDB, SQL Lite, Redis, Isar DB (Flutter)
4. Operating System: Windows, Linux: Ubuntu, Debian, CentOS, OpenWRT
5. Tools & Library: Git, Testify, Modbus and Genisys protocol, MQTT, RabbitMQ, MapBox, Docker, Flutter Riverpod, gRPC, Websocket, WebRTC SFU
6. Top Skill: Go & Python,LangChain, LangGraph, Research and Development (R&D), System Design

Working Experience

June 2023 - Present

PT SATUNOL MIKROSISTEM

- As a Software Developer, I played a key role in designing and developing a SCADA (Supervisory Control and Data Acquisition) system for monitoring Siemens devices. I utilized my expertise in the SNMP (Simple Network Management Protocol) protocol to establish seamless communication between the system and the devices.

- In this role, I focused on backend development using the Golang programming language and SINEC-NMS (Siemens Network Management System) for efficient data management and processing. Leveraging my skills, I successfully implemented robust and scalable backend solutions to handle real-time data monitoring, device control, and data storage. Additionally, I also contributed to the system's frontend development, employing the Flutter framework to create an intuitive and user-friendly interface. By utilizing my proficiency in frontend technologies, I ensured a seamless user experience while providing real-time visualizations, alerts, and reporting features.

- As a Software Engineer, I have been leveraging LangChain to integrate real-world data (sensors, database, and existing functions) into large language

models (LLMs) such as OpenAI, enhancing the capabilities of AI-driven applications.

- As a System Engineer, I am responsible for designing and developing a Fleet Management System — a comprehensive software solution that enables businesses to efficiently manage their fleet of vehicles. The system offers a centralized platform for:
    - Real-time vehicle tracking
    - Driver behavior monitoring
    - Maintenance scheduling
    - Fuel consumption
- The backend is built using Go (Golang), ensuring high performance and scalability. The frontend uses React.js for a responsive user experience. The system architecture implements Redis for caching, RabbitMQ for asynchronous message handling, and MongoDB as the primary data store, ensuring reliability and flexibility in handling complex fleet operations.

PT TRANSPORT SYSTEM SOLUTIONS INDONESIA

- As Team Leader at PT Transportasi System Solutions (TSS), I lead the development of PLC and SCADA simulators for PT KAI (Indonesian Railways Company). Our team is responsible for building a Train Traffic Simulator designed to train operators on railway signaling systems, specifically for the Purwokerto–Randegan stations.
- My primary role focuses on developing a PLC simulator using Go (Golang), with integration of the Modbus protocol to emulate real-world industrial communication. This simulator enables realistic, interactive training for operators, improving their readiness and safety awareness in managing rail traffic.

June 2023 - Nov 2023 **SIEMENS DIGITAL INDUSTRY**

- As Sinec NMS Specialist my job is to train and setup : Connections, Network Topology design, Reports, Notification using Siemens Sinec Network Management System (NMS) for PT Siemens Indonesia Clients

Nov 2022 – June 2023 **SELF TAUGHT FULL STACK DEVELOPER**

- As part of my previous role, I utilized ReactJS for the frontend, Golang Gin-Gonic framework for the backend, and MongoDB for the database. I prototyped a web chat application using WebSockets and JSON RPC, and developed a video call feature using WebRTC technology.

- I utilized React Typescript to consume News APIs. The project is designed using the Clean Architecture pattern and styled using Ant Design. The use of the Clean Architecture pattern ensures that the codebase is modular and easily maintainable. The project's components were tested using Jest. Jest is a popular testing library for JavaScript and is widely used for testing React applications.

April 2017 – Nov 2022 **PT. ELSICOM ENGINEERING**

- As an R&D Engineer. I Create protocol simulator, train signal simulator, vital and non-vital data logger, replay data, data reporting, SCADA design, and more.

- As a Professional Fee Coder. I was responsible for utilizing Eltraingraph, an application designed to plan, display, and monitor rail traffic using time-distance charts. With Eltraingraph, I was able to create graphs for trains in a user-friendly and efficient manner, allowing for the display of graphs in both planning and live modes, adjusting in real-time according to train delays. Additionally, I contributed to the continuous development of the platform-independent application, ensuring it remained a reliable tool for rail traffic management.

Nov 2014 – April 2017 **PT TRANSPORT SYSTEM SOLUTIONS INDONESIA**

- As an Engineer, I contributed to the successful development and deployment of a SCADA application for local railway stations across Java and Sumatra, as part of the Indonesia Train Traffic Control System. This system enables real-time monitoring and control of train operations, enhancing operational safety and efficiency. I also developed software tools and communication simulators for the Genisys protocol, supporting the integration and testing of Genisys PLCs. These tools were instrumental in validating system functionality and streamlining the development process.

Oct 2011- Oct 2014	**ALKMAAR ASIA PACIFIC, PT** • As a Junior Engineer, I contributed to the successful completion of a SCADA application for the Bangladesh Train Traffic Control System, supporting real-time monitoring and control of railway operations. Also, I developed software tools and communication simulators for the Genisys protocol, enabling integration and testing of Genisys PLCs. These tools played a critical role in validating system functionality and improving development efficiency.
19 Jul-3 Sept 2010	**PT Dirgantara Indonesia (Praktek Kerja Lapangan)** : • learn about AVIONICS

Educational Background

2008 – 2011 Polytechnic Bandung, Electronic Engineering

2005 – 2008 Senior High School 14 Bandung

2002 – 2005 Junior High School 14 Bandung

1996 – 2002 GRIBA 27/I Elementary School

Bandung, June 4, 2025

Royyan Wibisono