



# Royyan Wibisono

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## EXPERIENCE

### Freelance, Bandung— Software Developer

October 2022 - PRESENT

- 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.

Skill: ReactJS, TypeScript, News APIs, Clean Architecture, Jest, Ant Design, Frontend, Test software.

- 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.

Skill: TypeScript, REST APIs, Microservices, Atomic Design, NoSQL, Linux, Go (Programming Language), Gin, MongoDB, React.js, WebRTC, WebSocket.

- 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.

Skills: Troubleshooting, React.js, Chart, Front-End Development, Data Visualization.

### PT Elsicom, Bandung— Software Developer

October 2016 - October 2022

- I was responsible for designing and building a SCADA system to monitor and control train traffic on a busy railway network. I designed the software for the supervisory computers and HMIs. The

## SKILLS

Coding  
Software integration  
OOP programming  
SQL/NoSQL Database  
Atomic Design  
Clean Architecture  
Test-driven development  
Analytical thinking  
Test software  
Websocket  
WebRTC  
Microservices  
Data Visualization  
any TCP/UDP protocol

## LANGUAGES

English - Conversational

Bahasa Indonesia - Native

software was programmed to collect data from the sensors and display it in real-time on the HMIs, which were located in control rooms and other locations around the network. Operators could use the HMIs to monitor train traffic and detect any issues that might arise.

- I Managed disaster recovery planning and implementation to protect data loggers.
- I Manage data Logger and visualize data for report and replay of train traffic events using python and docker as microservice.
- I Verified data logger performance after updates to identify and correct inefficiencies.
- I Create a protocol simulator to emulate controls and indications from hardware/PLC.

Skill: Python, C#, VB .net, SCADA, PcVue, MySQL, Data Logging, Data Replay, Data Visualize, Docker, TCP/UDP protocol, Modbus, Genisys, Software integration, Analytical thinking, Test software.

## **PT TSS, Bandung— *Engineer***

October 2011 - October 2016

- Develop software and tools for simulation, HMI Design, and Develop SCADA software.

Skill: C#, VB .net, SCADA, PcVue, Genisys protocol, Software integration, Analytical thinking, Test software.

## **EDUCATION**

### **Politeknik Negeri Bandung, POLBAN— *Ahli Madya (D3)***

2008 -2011

Graduate from Politeknik Negeri Bandung (POLBAN) as Electronic engineer with my Final Project :

Airplane Simulator Model using Gyroscope Concept.

## **MORE ABOUT ME**

### **Professional Summary — *Detail***

As an experienced programming professional, I have a detail-oriented and self-motivated approach to producing high-quality code using a variety of programming languages such as Typescript, Go-lang, Python, C# and C/C++. I am highly organized and maintain thorough project notes, allowing me to make precise coding choices and quickly resolve errors to ensure the best possible product.

In addition to my programming expertise, I have specialized in real-time

communication using advanced technologies such as WebSocket and WebRTC. I continually strive to stay up-to-date with the latest advancements in concurrent programming and web development, ensuring that the systems I build are optimized for maximum performance.

In my previous role, I designed a SCADA system for train traffic signaling and managed disaster recovery planning and implementation to protect data loggers. I have experience managing data loggers, visualizing data for reports and replays of train traffic events, and verifying data logger performance after updates to identify and correct inefficiencies.

In my studies, I have developed a strong foundation in hardware and software development, and I am particularly drawn to IoT and sensor systems. I have also gained practical experience in C/C++ programming, PCB design, and embedded systems through experience and personal projects.

#### **ONLINE CV & PORTFOLIO**

<https://royyanwibisono.github.io/tunatech/>