



M Zulfikar Isnaen

SOFTWARE DEVELOPER · MECHATRONICS ENGINEER · SOLUTION ENGINEER (MANUFACTURING EXECUTION SYSTEM)

No. 16 Karang Sari Street, Kec. Cimahi Selatan, Jawa Barat, Indonesia 40535

☎ (+62) 857-5996-6626 | ✉ isnaen70@gmail.com | 🏠 zulfikarisnaen.com | 📱 zulfikar4568 | 🔗

zulfikar-isnaen-5974121b6

Education

POLMAN (Politeknik Manufaktur Negeri Bandung)

Bandung, Indonesia

ASSOCIATE'S DEGREE IN MECHATRONICS ENGINEERING 3,60 OF 4,00

2017 - 2020

- Final project for "Implementation Navigation System using ROS (Robot Operating System) for Autonomous Mobile Robot (AMR)"
- Other project "Implementation interpolation CNC 2.5D using Algorithm Digital Differential Analyzer (DDA)"

SMKN 1 Cimahi

Cimahi, Indonesia

ASSOCIATE'S OF INDUSTRIAL ELECTRONICS

2013 - 2017

- Final project for "How to Work of System Air Conditioner Type MSF09CRN"

Skills

Core Languages	Typescript, C#, Ruby
Environment	Nodejs, .NET
Web Framework	Nestjs, Reactjs, Vue, Vite, Ruby On Rails
Databases	Microsoft SQL Server, PostgreSQL
Infrastructure Tool	Docker, Kubernetes, Helm, Terraform, Terragrunt, Github Action, Lens
Messaging System and Caching	NATS, Redis
Robotics	C++, Robot Operating System
Low Code Development	Mendix
Enterprise Industrial	Manufacturing Execution System, Opcenter Core Siemens Software

Work Experience

Vechr Community

Indonesia

FULL STACK ENGINEER

Jan. 2022 - Present

- Developing an application IIoT refer to ISA-95
- Developing an Event driven Application Monitoring Machine using Nest/Typescript and Vue/Typescript
- Create Realtime Historian data machine using Web Socket
- Create Audit History app
- Create Drag & Drop Chart (Widget) for Dashboard, and connect with Web socket to achieve Realtime Chart System
- Manage Database Postgresql and Time Series Database (InfluxDB)
- Create Deployment Kubernetes using Helm Chart
- Sending Alert to SMTP
- Knowledge gained: Event Driven Architecture, Microservices Pattern, Usage of Message Broker (NATS, MQTT), Container Orchestration, Manufacturing System, Design Authentication and Authorization, Restfull Pagination
- Tech Stack: Kubernetes & Helm Chart, Terraform, Terragrunt, GCP, Docker, NATS (Messaging System and Caching), MQTT, GIT Hooks, NGINX API Gateway, Node Mailer, Nest, Prisma ORM, State Management(pinia), Vue/Typescript, Husky, Commitizen, linter

Opex Consulting Group

Indonesia - Singapore (hybrid)

SOLUTIONS ENGINEER

Apr. 2021 - Present

- Developing an Application using Mendix Platform.
- Collaborate team using agile methodologies in Mendix Platform.
- Installing and Configuring MES (Manufacturing Execution System) Siemens Opcenter Core architecture, SMTP, Windows Server 2019, SQL Setup, Windows Failover, Microsoft NLB (Including SSL), SQL Server Always On, IIS 8
- Developing a Windows Service for Integration MES Siemens to another system like an ERP System and Machine/Scada Level using .NET Framework (v4.7.2, C#)
- Manage Database SQL Server.
- Created Modelling MES Siemens based on Business Requirement. for Traceability, Process Control, Acquisition Data, Production Management, Quality, Material Management.
- Design and Create Application for Manufacturing Process.
- Knowledge gained: Software Enterprise, Process Control, Acquisition Data, Production Management, Quality, Material Management, Maintenance Management, Data Integration
- Tech Stack: C#, MES Siemens software, Desktop Application, Mendix, Windows Server 2019, Redis, Windows Service, ASP.NET

ThreeSixty

Remote

SOFTWARE DEVELOPER (FREELANCE)

Feb. 2022 - Jul. 2022

- Created Frontend Application.
- Doing Integration with Backend Rest API.
- Collaborative using Agile (JIRA).
- Knowledge gained: Vuejs/Typescript, Docker, JWT auth, Stripe

Synergy Engineering

BSD Tangerang, Indonesia

FULL-STACK DEVELOPER

Jan. 2021 - Apr. 2021

- Developing Application SBS (Synergy Business Suite) to create Front End and Backend using Ruby On Rails Framework.
- Collaborate team with Kanban Methodologies using Trello.
- Create API backend Rails with Postgresql.
- Create Drawing tagging for Engineering Drawing.
- Version Control System using Git and Gitlab.
- Knowledge gained: Database Design, Authentication & Authorization, GIT FLOW
- Tech Stack: ruby, rails MVC, Javascript, HTML (.erb)/ Slim, SASS, NPM, GITLAB, Leafletjs, Cancancan, Devise, Dropzonejs, Bootstrap 4.

L'Oréal (PT Yasulor Indonesia)

North Cikarang, West Java, Indonesia

SOFTWARE DEVELOPMENT ENGINEER

Sept. 2019 - Jan. 2020

- Doing Software Development "Inspection Check application using ASP.NET and VB.NET".
- Doing Maintenance & Preventive on Filling Machine.
- Doing Maintenance & Preventive Process Machine SKID.
- Knowledge Gained: VB.net, ASP.net, Desktop Application, Maintenance system.

PT Datareka Integrasi Teknologi

Cimahi, West Java, Indonesia

FREELANCER

March. 2017 - July. 2017

- Troubleshooting Board PCB of Security Panel
- Assembly Board PCB Controller and Power Supply using SMD Component

Midea Electronics Indonesia

North Jakarta, Indonesia

FIELD SERVICE ENGINEER

Jun. 2016 - August. 2016

- Maintenance and repair Air Conditioner.

Extracurricular Activity

Industrial Electronics Robotics

Cimahi, Indonesia

PROGRAMMER AND PLANNER

2015 - 2017

- Gained expertise in festo didactic programming robotino.
- Applied Principles of Mobile Robotics.
- Create strategy for challenges in competition.
- Got 1st place winner of Mobile Robotics in West Java, Indonesia
- Got 4th place winner of Mobile Robotics National in East Java Malang, Indonesia

Robotic Engineering Society of Polman

Bandung, Indonesia

ELECTRICAL AND PROGRAMMERS

2018 - 2019

- Designing architecture of robotic system
- Programming Embedded System using C++
- Implementation C++ in PID Control
- Creating Schematic PCB for Motor Driver, Driver for Pneumatic System
- Got 4th place winner of Kontes Robot Abu Indonesia in West Java, Bandung, Indonesia

Honors & Awards

DOMESTIC

2020	1th Place , BEST GRADUATION OF POLMAN	<i>Bandung,Indonesia</i>
2019	1th Place , BEST ACADEMIC OF POLMAN	<i>Bandung,Indonesia</i>
2019	4th Place , ROBOT ABU INDONESIA (KRAI)	<i>Bandung,Indonesia</i>
2018	1th Place , BEST ACADEMIC OF POLMAN	<i>Bandung,Indonesia</i>
2016	4th Place , MOBILE ROBOTICS NATIONAL 4th	<i>Malang,Indonesia</i>
2016	1th Place , MOBILE ROBOTICS WEST JAVA	<i>WestJava,Indonesia</i>

Certificates

2022	Docker & Kubernetes: The Practical Guide , Udemy
2022	The Nest JS Bootcamp - Complete Developer Guide , Udemy
2021	Rapid - Mendix Developer Certification , Mendix
2021	React Js Web Frontend , SanberCode

Program Committees

2017	Publication and Documentation , NATIONAL CAD CAM COMPETITION AND SEMINAR	<i>Bandung,Indonesia</i>
2019	Division of Social community , Himpunan Mahasiwa Teknik Otomasi Manufaktur dan Mekatronika	<i>Bandung,Indonesia</i>