



# M Zulfikar Isnaen

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

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## Summary

Currently I'm working as a solution engineer and freelancer of a software developer. As a solution engineer (include Software Engineering), I work especially in Manufacturing Execution System (MES) Software Enterprise from Siemens. I solved some complex business problems in manufacturing through technology.

My passion is creating the innovation to solve the problem and helping the people to reach their purpose. Since my background is from Mechatronics so I understand about Mechanical, Electrical, Information System. But from here I'm focusing on combination of Electrical (Embedded System) and Information System.

## Skills

<b>Full Stack Development</b>	Mendix, Ruby on Rails
<b>Back-end</b>	Nodejs, Nestjs/Typescript, NATS Messaging System, Windows Service/C#.NET, Redis
<b>Front-end</b>	Reactjs, Vuejs/Typescript, Figma
<b>Programming</b>	Typescript, Javascript, Ruby, C#, Bash
<b>Deployment</b>	Docker, VPS, AWS (EC2), GCP (Compute Engine), Heroku, Netlify
<b>SVN</b>	Git, Github, Gitlab
<b>Database</b>	SQL Server, MySQL, MongoDB, Postgresql
<b>OS</b>	Windows Server 2019, Linux
<b>Enterprise Industrial</b>	Manufacturing Execution System, Opcenter Core Siemens Software
<b>Robotics</b>	Robot Operating System (C++), Robotino Festo Didatic
<b>Microcontroller &amp; Design</b>	Altium Designer, Solidworks, AVR, Industrial Electrical
<b>Languages</b>	English, Indonesia

## Work Experience

### 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: C#, MES Siemens software, Desktop Application, Manufacturing System, Mendix, Windows Server, Distributed Cached

### 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

FULL-STACK DEVELOPER

BSD Tangerang, Indonesia

Jan. 2021 - Apr. 2021

- Developing Application SBS (Synergy Bussines 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: ruby, rails MVC, Javascript, HTML (.erb)/ Slim, SASS, NPM, GIT/GITLAB, Leafletjs, Cancancan, Devise, Dropzonejs, Bootstrap 4.

## L'Oréal (PT Yasulor Indonesia)

SOFTWARE DEVELOPMENT ENGINEER

North Cikarang, West Java, Indonesia

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 Integrasia Teknologi

FREELANCER

Cimahi, West Java, Indonesia

March. 2017 - July. 2017

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

## Midea Electronics Indonesia

FIELD SERVICE ENGINEER

North Jakarta, Indonesia

Jun. 2016 - August. 2016

- Maintenance and repair Air Conditioner.

## Achievement

2020	<b>BEST GRADUATION OF POLMAN</b> , Politeknik Manufaktur Bandung	Bandung, Indonesia
2019	<b>BEST ACADEMIC OF POLMAN</b> , Politeknik Manufaktur Bandung	Bandung, Indonesia
2019	<b>ROBOT ABU INDONESIA (KRAI) 4th</b> , Ristekdikti (Kontes Robot Abu Indonesia)	Bandung, Indonesia
2018	<b>BEST ACADEMIC OF POLMAN</b> , Politeknik Manufaktur Bandung	Bandung, Indonesia
2016	<b>MOBILE ROBOTICS NATIONAL 4th</b> , Kemendikbud	Malang, Indonesia
2016	<b>MOBILE ROBOTICS WEST JAVA 1th</b> , Dinas Pendidikan Jawa Barat	West Java, Indonesia

## 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"

## Organization

### Robotic Engineering Society of Polman

Bandung, Indonesia

ELECTRICAL AND PROGRAMMERS

2018-2019

- Designing architecture of robotic system
- Programming Embedded System
- Creating Schematic PCB for Motor Driver, Driver for Pneumatic System
- Event: Kontes Robot Abu Indonesia

### Himpunan Mahasiswa Teknik Otomasi Manufaktur dan Mekatronika (HIMAMO)

Bandung, Indonesia

KEMASYARAKATAN

2017-2020

- Survey in Lembang Village to implements Solar Panel System

### Robotika SMKN 1 Cimahi

Cimahi, Indonesia

ELECTRICAL AND PROGRAMMERS

2016-2017

- Programming of FESTO Robot Didatic (Robotino)
- Event: Mobile Robotic tingkat Jawa Barat, Mobile Robotic tingkat Nasional