# Rizky Ardi Maulana

rizkyardimaulana@gmail.com| +628986983930 | LinkedIn | Github | Portfolio

## Summary

An Electrical Engineering graduate, currently working as a Computer Vision Engineer for CAD-IT Consultant. Passionate in software development with 2 years of work experience in developing and delivering computer vision application as services.

## Education

**Institut Teknologi Bandung** Bandung, Indonesia
B.Eng. Electrical Engineering, GPA: 3.62/4.00 Aug 2017 – Oct 2021

## Work Experiences

**CAD-IT Consultant (Asia) Pte Ltd** Bandung, Indonesia
*Computer Vision Engineer* Jul 2021 – present

- Researched, developed, and implemented scalable application for object detection, defect detection, action recognition, and video analytics
- Develop API services with Golang and Python as the backend for a computer vision web application with micro-service arhitecture
- Researched and implemented containerization with docker for computer vision application development and deployment
- Develop and deploy computer vision application as services with REST and gRPC interface
- Researched the optimization of computer vision application deployment using Onnx and TensorRT

**Xirka Silicon Technology** Bandung, Indonesia
*Embedded Engineer Intern* Jun 2019 – Aug 2020

- Researched the capability of Real Time Operating System in Xirka Ardunesia Microcontroller
- Implemented Real Time Operating System in Xirka's Smart Meter Project

**Institut Teknologi Bandung** Bandung, Indonesia
*Microcontroller System Laboratory Assistant* Mar 2021 – Jul 2021

- Content writer for the new 2021 Microcontroller System Laboratory course module
- Supervised and Guided Students of Microcontroller System Laboratory to comprehend and pass the course

*Computer System Architecture Laboratory Assistant Coordinator* Sep 2020 – Dec 2020

- Responsible for Preparation, Planning, organizing, and executing the Computer System Architecture *Course*

*Problem Solving using C Laboratory Assistant* Jan 2020 – May 2020

- Supervised and guided the students of Problem Solving in C Laboratory to comprehend and pass the course

## Projects

**Personal Protective Equipment (PPE) Inspection** June 2022

- A computer vision application that can automatically detect whether a worker is wearing the necessary PPE for a specific task or environment. There are five inspected equipment: helmet, safety glasses, mask, vest, safety gloves, and safety shoes.
- The inspection records are stored in the database and can be seen on an online dashboard.
- The inference engine is deployed on a Nvidia Jetson Nano while the remote server is deployed on Heroku.

**Moving Asset Tracking** Jul 2021

- An IoT solution for monitoring motorcycles. The system collects data such as location, speed, acceleration, gyro, driver information, fuel level, battery voltage level, and ignition status. The data are sent to the server using MQTT to be stored into database and displayed on the dashboard.

**License Plate Recognition** May 2021

- Detecting license plate and recognizing its characters to help E-ticketing system implementation.

**Covid-19 Detection** May 2021

- Detection Covid-19 sign using signs of opacity in radiological images and deep learning approach as initial commendation for covid-19 diagnosis before the final diagnosis results from the doctor who is responsible for the patient.

**PCB Defect Detection and Classification** Dec 2020

- PCB Defect Detection and Classification using OpenCV and machine learning approach.

# Organizational Experiences

**Dagozilla Mobile Robot Team** Bandung, Indonesia

*Head of Electrical Division* Jul 2019 – Oct 2020

- Responsible in electrical research and development of Dagozilla's third generation autonomous mobile soccer robot

*Electrical and Embedded Engineer* Sep 2018 – Jul 2019

- Designed and manufactured hardware of Dagozilla's Soccer Robot and Telepresence Robot
- Programmed the firmware of the Dagozilla Soccer Robot and Telepresence Robot to integrate the sensors and actuator

# Skills

**Languanges:** Indonesian (Native), Javanese, English

**Technical Skills** : C, C++, Golang, Python, Docker, OpenCV, PostgreSQL, MongoDB, Nginx, Rest API, gRPC, Minio Object Storage, Redis, Pytorch, Onnx, TensorRT