EVAN FEBRIANTO

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A computer vision engineer with a background in electrical engineering who aspires to make the world a better place by creating innovative and beautiful solutions to problems that improve the quality of people's daily lives. Working with artificial intelligence presents me with new and interesting challenges every day.

WORK EXPERIENCE

CAD-IT Consultants (Asia) Pte Ltd

Computer Vision and Robotics Lead, Singapore   April 2021 – present

- Led 11 people to develop computer vision and robotics products to meet the needs of our AI
- Built system for visual indoor positioning which led to a project closing of over $100K
- Built a fully customized end-to-end cycle of acquiring data, annotation, augmentation, training, and testing for an object recognition tool with Python and PyTorch
- Extensive data analysis & machine learning concepts to understand the structure of the data and increase model's performance in real time
- Developed automatic optical inspection (AOI) algorithm for production lines in manufacturing industries
- Built a data drift monitoring system for computer vision applications to adjust the model according to the new data
- Researched on visual SLAM for drone with 5 RGBD cameras mounted on the platform
- Built a pattern recognition with 2D and 3D LiDAR point cloud data for mobile robotics (AMR / AGV)
- Implemented dynamic obstacle avoidance algorithm by predicting object's future position on mobile robotics
- Conducted experiments on an advanced land detection algorithm with Python and OpenCV for self-driving cars

Machine Learning Engineer, Singapore   Sep 2019 – March 2021

- Proficient in TensorFlow and Keras for Deep Learning including Tensorboard for monitoring. Also did provisioning and hardware configuration from scratch to match with existing applications.
- Helped companies by delivering projects such as:
  - Smart factory digitalization in Singapore
  - IIoT and AR integration
  - Robot integration for smart factory
  - Defect detection for plastic products
  - Object counter program
- Designed a scalable end-to-end IoT architecture from data collection to visualization
- Conducted IoT training for foundation and analytics
- Conducted industrial robots data tapping training
- Designed ERD for several databases in PostgreSQL and MSSQL
- Application deployment

Machine Learning Engineer, Indonesia   Sep 2018 – Aug 2019

- Developed a custom object detection in TensorFlow using RetinaNet focal loss function and ResNet-50 as its backbone
- Developed a time-series prediction for machine breakdown forecast using LSTM
- Developed a defect image classification program on rubber products

PT. Rekayasa Kecerdasan Buatan

Machine Learning Engineer, Indonesia   July 2018 – Sep 2018

- Developed a face recognition product for unmanned store prototype
- Managed dataset collection and augmentation
- Responsible for image dataset quality for training process

Smart City and Community Innovation Center

Assistant Research Engineer, Indonesia   Jan 2018 – July 2018

- Designed a PCB to gather data from GPS, odometer, heart rate sensor, and others
- Coded microcontroller firmware to read sensor data
- Designed a simple web server to retrieve data from the board

PT. Tricada Intronik

Machine to Machine System Engineer Intern, Indonesia   May 2017 – July 2017

- Developed a simple license plate recognition using a traditional detection method in OpenCV
- Implemented kNN algorithm as a classifier to recognize characters

EDUCATION

Bandung Institute of Technology, Indonesia   Aug 2014 – July 2018

- **Bachelor of Engineering (Electrical and Electronic Engineering)**
- **Honors (Cumlaude)** CGPA: 3.58/4.00
- Specialization: Computer Vision and Robotics
- Relevant Modules: (1) Robotics (2) Fundamentals of Intelligent Systems & Controls
  (3) Parallel Computing & Architecture

CERTIFICATIONS

Self-Driving Cars Engineer Nanodegree

Machine Learning from Coursera

ThingWorx Professional Curriculum for Developer

HONORS-AWARDS

Top 3% (28 from 1,034) in Shopee Code League Data Science Challenge, International	2021
1st Winner in National Design Competition to Help Visually Impaired Person, Indonesia	2017
Second Runner Up in National Robotics Competition (KRI), Indonesia	2017
1st Winner in MIPAFEST Scientific Paper Competition, Indonesia	2016
1st Winner in Youth Innovation Camp, Indonesia	2016

PUBLICATIONS

Hardware Implementation in Developing Wheeled Soccer Robot for Middle Size League	2018
Wheeled Soccer Robot Platform Development	2017

SKILLS

Top skills: Computer Vision, Machine Learning, Robotics

Languages: English (Full Professional), Indonesian (Native)

Software Programming: Python, C++, HTML/CSS, JavaScript

Deep Learning Frameworks: TensorFlow, Keras, PyTorch

Operating Systems: Windows, Linux