

SOFTWARE ENGINEER · ROBOTICS ENGINEER

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Summary_

A student currently pursuing a bachelor's degree in computer science from Institut Teknologi Bandung with high interests in robotics and AI, mainly focused in computer vision, perception, and state estimation. A proactive person who is eager to learn new things and has good communication skills. An aspiring engineer currently looking for internship opportunity in DeepMind UK as robotics intern.

Education

ITB (Institut Teknologi Bandung)

Bandung, Indonesia

BACHELOR OF ENGINEERING, COMPUTER SCIENCE (GPA 3.XX/4.00)

Aug 2016 - Jul 2020 (expected)

- Currently doing final assignment about autonomous navigation and control for simultaneous localization and mapping on mobile robots.
- · Is currently active in a robotics team focusing on mobile robots, doing research and software implementations.

Skills

Programming Python, C++, Golang, Javascript, Node.js, express

Systems and Tools ROS (Robot Operating System), Unix Operating Systems, OpenCV Library

Human Languages Indonesian (native), English (bilingual/native proficiency)

Experiences _____

SOFTWARE ENGINEER INTERN

Shopee Internasional Indonesia

Jakarta, Indonesia

May 2019 - Aug 2019

• Implemented back end handler component that deals with high number of requests per second.

- Created API for voting system used in TV shows.
- Created feature release manager to enable independent and individual releases of features for different countries.

Dagozilla ITB Robotics Bandung, Indonesia

LEAD PROGRAMMER Sept 2019 - Sept 2019

- · Generally direct the research on computer vision, robotic system controls, robot AI, and software UI/UX.
- Designed and implemented AI for goalkeeper robot behavior and decision making.
- Did research and implementation on global robot pose estimation using Monte Carlo Localization method.

PROGRAMMER Sept 2017 - Sept 2018

- Designed architecture for computer vision system software for football-playing robots that compete in Indonesian MSL.
- Made object (ball, obstacle, and field) detection for MSL robots using OpenCV library.

Projects

Mobile Telepresence Robot

Robotics

A MOBILE TELEPRESENCE ROBOT THAT CAN BE CONTROLLED REMOTELY VIA THE INTERNET USED FOR TELECONFERENCE

2018

- Programmed the robot control and inverse kinematics calculations.
- Programmed the hardware interface and microcontroller.
- Created video chat software for the robot-mounted and user-facing applications using WebRTC.

Peer-to-Peer Collaborative Editor

Distributed System

2019

A SIMPLER AND PLAINER VERSION OF GOOGLE DOCS

• Created peer-to-peer collaborative text editor (simpler replica of Google Docs) utilizing CRDT.

• Built the graphical user interface with Qt.

Awards

2019	4th Place, KRSBI Beroda, Kontes Robot Indonesia Nasional (National league of Indonesian Robocup MSL)	Indonesia
2019	1st Place , KRSBI Beroda, Kontes Robot Indonesia Regional 2 (Regional league of Indonesian Robocup MSL)	Indonesia
2019	Best Strategy, KRSBI Beroda, Kontes Robot Indonesia Regional 2	Indonesia
2018	Best Strategy, KRSBI Beroda, Kontes Robot Indonesia Regional 2	Indonesia