Dionesius **Agung**

ROBOTICS SOFTWARE ENGINEER

☐ (+62) 813-3645-6789 | ✉ dionesiusap@gmail.com | ⊙ dionesiusap | in dionesius-agung

Summary

A robotics software engineer with more than a year of professional experience in robotics and deep tech industry. Has good knowledge in C++ and Python, experienced with ROS and Gazebo Simulator. In addition to the engineering and technical aspects of robotics, interests include product management of robotic software and hardware. Graduated with B.Sc. degree in computer science from Institut Teknologi Bandung in 2016, ex-student-resident of Autonomous Vehicle Research Group Lab.

Education

Institut Teknologi Bandung   *Bandung, Indonesia*

BACHELOR OF SCIENCE, INFORMATICS/COMPUTER SCIENCE   *Aug 2016 - Oct 2020*

- Thesis: "Autonomous Exploration and Active Mapping with Mobile Robots".
- Was an active member of a robotics developer team which resides in the Autonomous Vehicle Research Group Lab.
- Had organizational experience in the Computer Science Student Union, served as Council Secretary and then as head of a committee in the Council of Supervisory and Representatives.

Skills

Programming	Python, C++
Tools and Technologies	Robot Operating System (ROS), Linux Operating Systems, OpenCV Library, Gazebo Simulator
Languages	Indonesian (native), English (C1)

Professional Experience

Movel AI   *Singapore, Singapore*

ROBOTICS SOFTWARE ENGINEER   *Sept 2020 - Present*

- Works closely with product manager and other robotics and web engineers in the development and maintenance of the flagship Robotics Navigation System (RNS) product features.
- One of the key engineers responsible for the creation and initial development of the Fleet Management System (FMS) product.
- Designed, implemented, and maintains the codebase of a multi-ROS-network robotic simulation system with Gazebo for the FMS product.
- Implemented an experimental, novel camera-based mapping algorithm in collaboration with a senior robotics engineer.

Shopee International Indonesia   *Jakarta, Indonesia*

SOFTWARE ENGINEER INTERN   *May 2019 - Aug 2019*

- Implemented back end handler component that deals with a high number of requests per second.
- Created "Feature Release Manager" application which allows independent and individual releases of features for different countries.
- Wrote software documentation of "Feature Release Manager" application and other software components that I implemented.

Organizational Experience

Dagozilla Robotics (Autonomous Vehicle Research Group Lab, ITB)   *Bandung, Indonesia*

SENIOR TECHNICAL ADVISOR   *Sept 2019 - Sept 2020*

- Advised the team on nontechnical and technical subjects.
- Did more advanced research in state estimation.

LEAD SOFTWARE ENGINEER   *Sept 2018 - Sept 2019*

- Led the design and development process of the software system for a telepresence robot as well as the documentation of the system.
- Directed the research and development on computer vision, robotic control systems, robot AI, and software UI/UX for MSL-class robots.
- Initiated better engineering and software documentation practices that enable the sharing of knowledge between divisions.

SOFTWARE ENGINEER   *Sept 2017 - Sept 2018*

- Designed and built the computer vision software component for MSL-class competition robots using OpenCV with ROS in C++.
- Created software documentation of the vision system that I built as well as other legacy codes that were going to be migrated.

Computer Science Student Union, ITB   *Bandung, Indonesia*

HEAD OF ASPIRATION COMMITTEE, COUNCIL OF SUPERVISORY AND REPRESENTATIVES   *March 2019 - March 2020*

- Managed to increase the presence of the committee within the students' community.
- Increased the number of incoming feedback by up to 500% by implementing proactive feedback gathering methods.
- Gathered opinions from the students regarding a possible amendment to the Charter of the Union.
- Organized an extraordinary council session addressing the amendment to the Charter.

COUNCIL SECRETARY, COUNCIL OF SUPERVISORY AND REPRESENTATIVES   *March 2018 - March 2019*

- Archived incoming letters and notices addressed to the council and wrote responses if necessary.
- Wrote and archived decision letters, documents, and notices of the council.
- Wrote and authorized the council's minutes of meetings.

MEMBER OF REPRESENTATIVES, COUNCIL OF SUPERVISORY AND REPRESENTATIVES   *Sept 2017 - March 2018*

- Approached fellow union members to ask for feedback and suggestions for the union.
- Proposed policies and solutions to the council and the executive body of the union based on suggestions and feedback from peers.