AHMAD DIDIK SETIYADI

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OBJECTIVE

I am an Embedded Software Engineer with 2 years' experience in developing cutting edge embedded systems. I have skills in **C**, **C++** and **Python**, especially in **embedded systems**. I am experienced in optimizing **embedded Linux** and **RTOS** systems which interact with sensors and actuators.

EXPERIENCE

Abarobotics | Semarang, Indonesia

Embedded Software Team Lead (Nov 2022 - **present**)

- Managing embedded people for working on several projects and research
- Developing mobile robot guide in Hospital with NAV2 ROS2 based
- Optimized 80% CPU resource efficiency in embedded Linux automatic parking gate with RFID and LPR (License Plate Recognition)
- Developed embedded Linux automatic attendance smart meeting monitor with NFC and face recognition
- Developed embedded hardware watchdog for monitoring existing project with Espressif chip based

Abarobotics | Semarang, Indonesia

Embedded Software Engineer (Dec 2021 – Nov 2022)

- Developed low level control system for automatic excavator robot with RTOS
- Developed automatic medicine pills sorted with RTOS
- Tested and documented on embedded Linux automatic parking gate with RFID system.

Digitels | Remote

IoT Firmware Engineer (Sept 2022 – Feb 2023)

- Optimized existing embedded code for gaining efficiency and decreasing memory consumption around 30%
- Worked on multiple communication such as Wi-Fi and LoRa

Skilvul | Remote

IoT Mentor SIC (Samsung Innovation Campus) 4 (April 2023 – **present**)

- Mentored IoT bootcamp for building hardware and software of selected mentee's idea
- Mentored Python class for IoT bootcamp preparation.

Skilvul | Remote, Indonesia

IoT Mentor SIC (Samsung Innovation Campus) 3 (June 2022 – Sept 2022)

- Selected to be the 3 best mentors of 9 mentors
- Mentored IoT bootcamp for building hardware and software of selected mentee's idea,

Redesma Technologies | Semarang, Indonesia

Embedded Software Engineer (Feb 2021 – July 2021)

- Developed automatic oil tank leveling with lidar sensor
- Developed blood shaker prototype with PID controller.

EDUCATION

Diponegoro University | Semarang, Indonesia

Electrical Engineering, Robotics | GPA 3.60 of 4.0 (2017-2021)

Thesis: 4 DOF Manipulator Robot with Inverse Kinematics and Trajectory Planning Using Robot Operating System (ROS)

Achievements:

- 3rd Runner Up Indonesian Humanoid Soccer Robot Competition Regional 1 (2020)
- 4th Runner Up UNNES University National Paper Competition (2019)
- 3rd Runner Up Indonesian Humanoid Soccer Robot Competition Regional 3 (2019)
- Bronze medal Thailand Inventor's Day (2019)
- 2nd Gajah Mada University Soccer Robot Competition (2018)

LEADERSHIP ACTIVITIES

Ews Bascorro | Semarang, Indonesia

Team Lead (Aug 2019 – Sept 2020)

- Managed humanoid soccer robot university team to build completely new robot with ROS based
- Developed robot movement gait and algorithms
- Migrated robot strategy algorithms code from AVR MCU based into ROS.

Ews Bascorro | Semarang, Indonesia

Motion Planner (Aug 2018 – Aug 2019)

- Developed robot movement gait

Engineering Study Forum | Semarang, Indonesia

Research Division Member (Feb 2018-Jan 2019)

- Contributed to research-based activity, learning strategy, and competition in Engineering Faculty

SKILLS & INTERESTS

Technical: Bash, C, C++, Python, Embedded Linux, RTOS

Interests: Optimizing embedded Linux performance and memory with battery efficiency and resources constrain.