## Danendra Clevero Ananda

Yogyakarta, 55581 | +6289655372561 | Gmail | LinkedIn | Gitlab | Github | Portofolio

## **Turning Code into Motion**

I'm a ROS Engineer with a background in Electrical Engineering from ITS and 4+ years of experience building robotic systems. My work centers on developing robust, ROS-based software for real-time robot perception, planning, and control. I code primarily in C++ and Python, and work natively in Linux environments. My goal is simple: create autonomous systems that move intelligently, adapt fast, and safe from bugs.

## **Work Experience**

#### SENIOR ROS SOFTWARE ENGINEER | WIDYA ROBOTICS | FEB 2025 - CURRENT

- Worked on load scanner R&D and unit maintenance using ROS, C++, and Lidar in Ubuntu.
- Worked for code standarization, and documentations.

#### OWNER (SELF-EMPLOYEED) | JIVANUSA ROBOTICS | JAN 2025 - CURRENT

- Established core project documentation templates and processes.
- Developed a photobooth application using React and Go.
- Led the design of an autonomous car platform using ROS.

## ROS SOFTWARE ENGINEER | WIDYA ROBOTICS | FEB 2024 - FEB 2025

- Worked on load scanner R&D and unit maintenance using ROS, C++, and lidar in ubuntu.
- Worked for code standarization, and documentations.

#### ROBOT SOFTWARE ENGINEER (PROJECT BASED) | KAKAROBOT | MAR 2024 - CURRENT

- Built an autonomous service robot with full path planning and obstacle avoidance.
- Developed a centralized communication system for multi-agent coordination in robotic soccer systems.

#### ROBOT SOFTWARE RND | IRIS | MAY 2021 - DEC 2023

 Developed control, perception, and main logic for omni-wheeled robots in C++ and ROS. Led software refactor (30K+ LOC), helped win multiple national/international robotics championships.

#### ROBOT SOFTWARE RND | PUI-AIHES | MAR 2023 - PRESENT

 Built production-ready UI system for a service robot using React.js and integrated it with ROS via UDP communication.

## ROBOT SOFTWARE RND (INTERNSHIP) | PUI-AIHES | SEPT 2023 - DEC 2023

Built Gazebo-based 3D simulation for wheeled robot soccer integrated with real robot code and ROS.

#### **Education**

# BACHELOR OF ENGINEERING | FEBRUARY 2024 | INSTITUT TEKNOLOGI SEPULUH NOPEMBER | AUG 2020 - FEB 2024

- Graduated in 3.5 years (7th semester) with GPA: 3.57 (Cum Laude)
- Thesis: Potential Field Path Planning on Wheeled Robot Soccer

• Built various robotics projects: line follower (AT89S) with assembly, middle size league robot with ROS, object recognition (C++ & neural nets), and more (see GitHub "Self Project" section)

#### Achivement

- 2nd Position at Video Challenge Robocup Asia Pacific, Japan, 2021
- 2nd Position at Kontes Robot Indonesia Regional, 2021
- 2nd Position at Kontes Robot Indonesia Nasional, 2021
- Best Design at Kontes Robot Indonesia Regional, 2021
- Grand Champion at Kontes Robot Indonesia, 2021
- 1st Position at Robocup Asia Pacific Cooperation Challenge, China, 2022
- 1st Position at Robocup Asia Pacific Ambition Challenge, China, 2022
- 3st Position at Middle Size Robocup, Thailand, 2022
- 1st Position at Kontes Robot Indonesia Regional, 2022
- 1st Position at Kontes Robot Indonesia Nasional, 2022
- Best Strategy Kontes Robot Indonesia Nasional, 2022
- Grand Champion at Kontes Robot Indonesia, 2022
- 2nd Position at Kontes Robot Indonesia Regional, 2023
- 3rd Position at Kontes Robot Indonesia Nasional, 2023
- Best Strategy Kontes Robot Indonesia Nasional, 2023
- 1st Position at FIRA Autonomous Car Challenge, 2023

#### **Research or Publications**

- GAZEBO SIMULATOR | IRIS | DOI 10.13140/RG.2.2.27949.87523 | GAZEBO SIMULATOR
- AUTONOMOUS CAR BIRD EYE VIEW | PUI-AIHES | AUTONOMOUS CAR PAPER
- THESIS | IRIS | DOI 10.13140/RG.2.2.29120.96007/1 | THESIS
- SOCCER ROBOT SOFTWARE | IRIS