AAN ARIA NANDA

082254410898 | aanaria6@gmail.com | www.linkedin.com/in/aan-aria-nanda

Electrical Engineer fresh graduate with experience to oversee and execute complex projects involving both electrical and other engineering teams. With a focus on IoT systems, I design and implement integrated mechatronic systems for control applications. My expertise spans electrical design, embedded programming (Python & C++), machine learning & deep learning, data analysis, computer vision, and CAD design. I am proficient in tools such as SOLIDWORKS, Microsoft Visual Studio Code, and 3D printing, which allow me to bring innovative concepts to life. My Key Skills & Expertise are Electrical Design, Embedded Systems (Python, C++), IoT Systems, Machine Learning, CAD Design(SOLIDWORKS, 3D Printing) and also Project Leadership. My passion for electrical engineering drives me to continually explore new research areas and push the boundaries of technology, particularly in Al-driven systems and IoT-based innovations. I thrive on designing electrical systems for embedded applications and seeing them come to life through coding and real-world implementation.

Experiences

Reinutech - Semarang, Indonesia

Mar 2025 - Present

Junior Electrical Engineer/Contract

IoT component manufacturing service company, Plasma Cutting, 3D printing and CNC.

- Responsible for conducting research and development for the Internet of Things project
- · Creating system work designs, bill of materials, purchasing, electronic design, and embedded programming

ABAROBOTICS - Semarang, Indonesia

Jun 2021 - Oct 2024

Mechatronic Engineer/Full Time

ABAROBOTICS is a company engaged in automation in the construction, retail and logistics sectors.

- Semi-Autonomous Excavator System: Designed mechanical and electrical systems for joystick movement control, contributing to the development of semi-autonomous excavation technology
- Autonomous Parking System: Created an electrical system based on computer vision to automate parking processes, improving
 efficiency and safety.
- Heavy Equipment Tracking and Monitoring System: Designed and implemented a GPS and 4G-based tracking system, incorporating the J1939 CAN bus protocol to monitor heavy machinery performance

Reinutech - Semarang, Indonesia

Jun 2020 - Jul 2020

Junior Electrical Engineer/Apprenticeship

IoT component manufacturing service company, Plasma Cutting, 3D printing and CNC.

- Designeed a remote of Human-Machine Interface system for controlling a nurse robot
- · Applieeed foundational mechatronics skill to develop user-friendly and efficient robotic control systems

Education Background

Universitas Diponegoro - Semarang

Aug 2017 - Dec 2021

Bachelor of Electrical Engineering, 3.14/4.00

- · Internet of Things
- Machine Learning
- Robotics
- Mechatronic
- Microcontroller

Organisational Experience

Undip Robotic Development Center - Semarang

Apr 2018 - Nov 2020

Head of Legged Firefighting Robot Division

Undip Robotic Development Center (URDC) is a student organization that houses robot development teams at Diponegoro University.

- Leading the research division of the Firefighting Robot to participate in the annual Indonesian Robot Contest organized by RISTEKDIKTI
- Responsible for creating algorithms together with the programming team

Forum Studi Teknik UNDIP - Semarang

Apr 2018 - Mar 2020

Member of the Education Division

Forum Studi Teknik is a student organization bureau at the faculty level that carries out work programs in the field of research and improving the quality of students at the Faculty of Engineering, Undip.

- Preparing and implementing the annual English debate and speech competition in the Undip Faculty of Engineering environment
- · Conduct supervision for the implementation of fleek, which is a forum for discussing English for internal FST administrators

Achievements & Other Experience

- Achievements (2018): Juara 2 Technocorner 2018 Divisi Soccer Robot Competition KMTETI FT UGM
- Achievements (2019): Gold Medal Award at the 2nd World Invention Technology Expo INNOPA
- Achievements (2019): Juara 3 Kontes Robot Indonesia (KRI) Divisi Kontes Robot Api Indonesia RISTEKDIKTI
- Achievements (2019): Finalis Pekan Ilmiah Mahasiswa Nasional ke 32 RISTEKDIKTI
- Achievements (2019): Juara 2 Lomba Karya Tulis Ilmiah Nasional Flarity LNG Academy
- Certification ⊚ (2024): Google AI Esseential | Course