

# **ROYAN UBAIDILLAH**

0895412365661 | royanub19@gmail.com | https://www.linkedin.com/in/royan-ubaidillah-278477285/ 15C Keputih Tegal Street, Keputih, Sukolilo District Surabaya City, East Java Indonesia

I am an Industrial Mechanical Engineering graduate with a strong foundation in mechanical systems maintenance, project management, and leadership. I have practical experience in optimizing mechanical components and improving production efficiency through various technical and cross-functional projects. With strong analytical skills, I am capable of leading and mentoring teams to achieve engineering objectives. Skilled in problem-solving, adaptable to dynamic environments, and proficient in technical tools, I am passionate about leveraging my expertise to drive innovation and operational efficiency in the field of engineering.

# **Education Level**

#### Institut Teknologi Sepuluh Nopember - Surabaya, Jawa Timur

Diploma in Mechanical Industrial Engineering, 3.30/4.00

- Thesis : Design and Development of a Regenerative Braking System for the Nogogeni VIII Evo Car
- PLN Innovation and Competitionin. Electricity Finalist 2023 (PLN ICE)
- Team Leader | 2nd Place, 2023 Energy-Efficient Car Competition (Urban Car Category, Ethanol)
- 1st Plale Winner of the Urban Electric Category Energy-Efficient Car Contest 2023.
- Electrical Paddock | 1st Place, 2022 Energy-Efficient Car Competition (Urban Car Category, Electric)
- TEKNOFEST (Efficiency Challenge Electric Vehicle Races Turkey) Finalist 2022.

# Work Experiences

# Science Techno Park (STP) Otomotif ITS - Surabaya

#### Supervisor, Conversion Workshop

Part of the STP ITS institution, focusing on developing technological innovations in the automotive sector, such as the conversion of vehicles from Internal Combustion Engine (ICE) to Battery Electric Vehicles (BEV). This workshop is involved in key activities such as conversion, maintenance, and prototyping of electric vehicles (EV)

- Managed and led the conversion workshop team, ensuring production targets and quality standards were achieved.
- Successfully coordinated and completed 7 electric motorcycle conversions that passed rigorous testing standards within the first month.
- Optimized workflow by supervising the conversion process, planning material requirements, and coordinating across technical teams.
- Provided technical training to team members, enhancing work efficiency and knowledge in vehicle conversion processes.

# FITS Electric Scooter Start-Up - Surabaya, East Java

# Chief of Technology Officer

FITS Electric Scooter Start-Up is a company born from academic research conducted by university lecturers and funded by HETI ADB. HETI ADB (Higher Education for Technology and Innovation – Asian Development Bank) is a funding program designed to promote innovation and technology development within higher education institutions. As a Type B startup, FITS focuses on creating sustainable products that combine cutting-edge technology with market needs.

- Serving as Chief Technology Officer (CTO), overseeing all aspects of product development and technological strategies.
- Successfully optimized electric scooter design by integrating advanced battery systems, motor technology, and IoT features.
- Established partnerships with suppliers and manufacturers to streamline production and reduce costs.

# Science Techno Park (STP) Otomotif ITS - Surabaya

#### Engineer Intership

Part of the STP ITS institution, focusing on developing technological innovations in the automotive sector, such as the conversion of vehicles from Internal Combustion Engine (ICE) to Battery Electric Vehicles (BEV). This workshop is involved in key activities such as conversion, maintenance, and prototyping of electric vehicles (EV)

- Designed and developed a prototype of an electric scrambler motorcycle, including motor, battery, and electrical systems integration.
- Conducted technical analysis and component selection for optimal performance and cost efficiency.
- Created and managed the project budget (BoQ) and ensured alignment with financial constraints.
- Performed market analysis to identify potential customers, pricing strategies, and market viability.
- Tested and validated the prototype's performance, safety, and compliance with industry standards.
- Compiled comprehensive technical and economic reports for future reference.

# PT. Panggung Electric Citrabuana - Jl. Raya Waru No. 1, Waru,

Sidoarjo, Jawa Timur 61256, Indonesia

#### Intership/Production

Established in 1970, Panggung Electric Citrabuana is a leading Indonesian electronics manufacturer, specializing in consumer electronics, 4G devices, and home appliances. Partnering with brands like Huawei, ZTE, JVC and AKARI, it offers R&D, quality control

Aug 2020 - Sep 2024

# Jun 2023 - Oct 2024

Oct 2024 - Jan 2025

## Feb 2023 - May 2023

# Jul 2018 - Nov 2018

(ISO-9001), and certification services, striving for global market leadership in Electronic Manufacturing Services (EMS).

- · Operated and managed tasks in the production line, ensuring smooth workflow and efficiency
- Assisted in the maintenance of production equipment to ensure optimal functionality.
- Conducted quality control checks for AC production, ensuring compliance with company standards.
- Performed repair and troubleshooting of defective units to maintain production quality.

# **Organisational Experience**

#### Nogogeni ITS Team - Surabaya, Indonesia

#### Electrical and Propultion System Manager

The Nogogeni ITS Team is a research team from Institut Teknologi Sepuluh Nopember (ITS) focused on developing low-emission vehicles, such as energy-efficient cars. They frequently participate in various competitions, including energy-efficient car competitions at both national and international levels

- · Developed control strategy of electric motor to reach its peak performance
- · Managed car electrical parts assembly
- · Collaborated with cross-functional teams to optimize car assembly process
- · Co-Worked with all technical division to develop car design based on driving-style and its weight
- · Co-Worked with Sponsorship and External Relations division to supply electrical research needs
- · Developed enhanced real-time monitoring system of vehicle based on Internet of Things and datalogger
- · Developed car battery safety system using battery management system and protector circuit
- · Optimized driving style based on data logger analytics
- Successfully managed all electrical research to gain the best Electrical Motor Urban Concept Kontes Mobil Hemat Energi 2023 with the result of 204 km/kwh that passed the previous result of 186 km/kwh

#### Nogogeni ITS Team - Surabaya, Indonesia

Electrical and Propultion System Staff

- Successfully enhanced duty cycle control system of Ethanol Fueled Engine to reach 200km/l consumption
- · Assembled electrical system and wiring of electric urban car and ethanol urban car
- · Co-Worked with all the other mechanical division to assembly car parts
- · Manufactured battery pack for urban electric car
- Manufactured real-time monitoring system of vehicle based on radio frequency transmission data to determine vehicle performance on the track

# **Skills, Achievements & Other Experience**

- Electrical Engineering: Experienced in designing and developing electrical systems, circuits, and control systems
- Mechanical Engineering: Strong foundation in mechanical systems design and Automotive
- Troubleshooting: Strong ability to diagnose and repair mechanical issues promptly.
- leadership: Proven ability to lead cross-functional teams, mentor junior engineers, and drive projects to successful completion.
- Teamwork: Strong collaborator, adept at working with multidisciplinary teams to achieve common goals
- · Adaptability: Quick to adapt to new technologies and processes in dynamic, fast-paced environments

Apr 2023 - Feb 2024

Apr 2022 - Mar 2023