AHMAD 'AFIEN ZIDAN

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Electrical Engineering graduate from Airlangga University (CGPA 3.72/4.00) with a strong passion for automotive EV. Alongside experience in EV projects, I have built robust skills in web development and software engineering through several IT bootcamps. Proficient in front-end technologies such as ReactJS and CSS Tailwind as well as backend development using Node is, Express, SQL & MongoDB databases. I am eager to integrate cutting-edge digital solutions with automotive technology and beyond.

EDUCATION

AIRLANGGA UNIVERSITY

Surabaya, Indonesia

Bachelor of Electrical Engineering

Sep 2020 - July 2024

Cumulative GPA: 3.72/4.00

- Final Project: Design Of Controller Area Network Communication Protocol in Battery Management System for Electric Vehicles
- Relevant coursework: Drive Control, System Automation, Design & Implementation Engineering Drawings, Intelligent Control.

WORK EXPERIENCES

PT Braja Elektrik Motor

Surabaya, Indonesia

Electric vehicle, Conversion ICE to BEV and electric motors research and manufacturing company.

Researcher

Jan 2024 - Now

- Supported Nextion HMI project for EV2W using CAN communication.
- Assisted in publishing research on "Used EV2W" and "Effect of BEV Connector with SPKLU," and ongoing SPBKLU research.

General Affairs Officer Sep 2024 – Dec 2024

- Managed conversion project for 275+ vehicles, including documentation, testing, and coordination with authorities.
- Oversaw procurement processes and secured IDR 2.75 billion in government incentives.

Electrical Engineer Intern

Dec 2021 - Feb 2022

• Executed conversion projects of 2+ ICE motorcycles to EV2W.

PT Industri Kereta Api (Persero)

Madiun, Indonesia

Railway manufacturing company, with a project to develop Electric Buses for the Bali G20 Summit

Research and Development Intern

Aug 2022 – Dec 2022

- Developed wiring maps for 40+ components and documented vehicle load calculations.
- Revised 15+ electrical schematics and maintained electrical systems for 25+ electric buses.

ORGANIZATIONAL

Team Electric Vehicle on Study (EV-OS) Airlangga University

Surabaya, Indonesia

Co-Founder & Electrical Manager

Apr 2022 – Dec 2023

• Managed schematics, QC, progress reports, and budgets for 3+ projects with 100+ components from 20+ suppliers.

Faculty Legislative Council

Surabaya, Indonesia

Legislative Commision

Jan 2022 – Jan 2023

Drafted 4 organizational regulations through stakeholder collaboration and consensus building.

Society of Renewable Energy (SRE) Airlangga University

Media and Marketing Officer

Surabava, Indonesia Jan 2021 – Des 2021

• Created 15+ renewable energy content; increased Instagram followers by 100+ through effective social media management.

PROJECT EXPERIENCES

Job Vacancy Website - NextStep (ReactJS Project)

Jan 2025

- Developed a responsive job portal using ReactJS with API integration and CRUD functionality; earned the Best Final Project award.
- Get web link here NextStep.

Effectiveness Evaluation of EV4W Electric Charging Connectors according to Permen ESDM

Jan – April 2025

- Analyzed 2022–2023 data, including CKD, CBU, and wholesale market figures from GAIKINDO.
- Evaluated connector usage and efficiency, resulting in a comprehensive evaluation report with technical recommendations.

Speaker – Electric Motorcycle Conversion Training, PPSDM KEBTKE

Feb 2025

Presented technical insights during a 3-day session at PPSDM KEBTKE with 26 participants.

Used E2W Vehicles Economic Market Review in Indonesia, Collaborate with ENTREV from ESDM

Sep - Oct 2024

Researched regulations, incentives, and consumer trends for used E2W vehicles in urban areas.

Design and build Electric Motorcycles (SAGA and ESA) for PLN ICE 2023 from Scratch

June – Nov 2023

• Created 5 detailed schematics and designed key systems for award-winning EVs (SAGA and ESA), achieving top speeds of 170km/h and 95km/h.

Conversion of Yamaha Byson ICE Motorcycle into Electric Motorbike (By-E) for PLN ICE 2022

July - Oct 2022

• Converted an ICE motorcycle to electric, achieving competitive performance and securing 4th place.

Assisting in the "Bus Listrik Merah Putih" project for the G20 Summit in Bali with PT INKA

Aug - Dec 2022

• Assisted with maintenance and design of electrical systems for electric buses at the G20 Summit.

Converting Vespa PX-150 into an Electric Vespa

Dec 2021 – Jan 2022

Installed wiring and modified the frame, significantly enhancing performance metrics.

Development of Electric Bicycles and Solar Panel Shelter for Community Service

Des 2021 - Sept 2023

Developed 4 electric bicycle models and maintained a solar panel shelter with reliable energy output.

TECHNICAL SKILLS

Skills : Electric Vehicle, Wiring Diagram, Project Management, Design Engineering. Teamwork, Time Management, Communication, Problem Solving, Work Ethics, Adaptive, Neat Work, Research.

Languages: Bahasa Indonesia (Native); English (ELPT Score 453).

Software: AutoCAD Electrical, Matlab, Proteus, Autodesk EAGLE, Picoscope, MS Office, Nextion Editor, Postman, VS Code.

Other Skills: UI/UX Design with Figma, CSS (Tailwind & Bootstrap 5), HTML, MVC, Backend SQL & NoSQL with Express, Node JS & MongoDB, Frontend with React JS.

Microcontroller: STM32, Arduino, ESP Series.

Programming Languages: C++, C, JavaScript, TypeScript.

ADDITIONAL

Courses:

SYNRGY Academy Batch 7 (36.8/100)
Sanber Code React JS - Web Frontend Development Batch 63 (Score 97/100, Best Final Project)
MERN Stack Sanber Campus X ITB Batch 5 (On-going)
WPU Ramadhan Camp - Kajian React.js Dari Dasar Hingga Mahir
WPU Course - Belajar MERN Stack
Jan 2025 - Now

Interests: Electric Vehicle, Research, Vehicle Conversion, Electrical Diagram and Wiring, Electrical Draft, Project Management, Microcontroller, Control System, Fuzzy Logic, Web Development, Front-end Development.

Honor & Awards:

- 1st Place in PLN ICE 2023
- Top 10 in PLN ICE 2023
- 4th Place in PLN ICE 2022
- 2nd Place in Essay Competition Held by Universitas Pendidikan Ganesha.
- Best Final Project and 2nd Best Student Sanber Code React JS Web Frontend Development Batch 63