

# AHMAD SHOBRI ARDIANA

Semarang, Indonesia | [ahmadshobri18@gmail.com](mailto:ahmadshobri18@gmail.com) | [Portfolio](#) | [Linkedin](#) | +62813-2932-8303



A resilient and technically adept **Electrical Engineer** with a strong focus on **mechatronics, automation, and system integration**. Completed intensive international training in electric vehicle systems at **Beifang Automotive Education Center, China**. Proven leadership in managing cross-functional initiatives through the **IEEE UB Student Branch** and in facilitating international collaborative programs with **GoldNation** across Southeast Asia. Experienced in supporting academic laboratories as a **Basic Measurement and Laboratory Assistant**, known for strong leadership, effective communication, and the ability to work collaboratively in multicultural and interdisciplinary environments.

## WORK EXPERIENCE

**Basic Electricity & Measurement Laboratory** | Asst. Lab Deputy Coordinator *Malang, Indonesia* | 12/2022 – 03/2025

- **Enhancing students' understanding**, delivering interactive teaching on electronic circuits, basic science, and electrical measurement to more than 100 students, bridging theory and practice.
- **Comprehensive assessment management**, managed evaluations from pre-tests, practical sessions, to post-tests, ensuring measurable improvements in academic and practical skills.
- **Effective practical coordination**, collaborated with the chief coordinator to organize schedules and ensure the smooth execution of laboratory sessions.
- **Professional liaison**, acted as a liaison between students and laboratory lecturers, facilitating effective communication and addressing technical requirements.

**Beifang Automotive Education** | Mechatronics Engineer *Beijing, China* | 08/2024 – 11/2024

- **Electrical systems in electric vehicles training**, acquired in-depth knowledge of EV electrical systems, covering battery analysis, charging design, communication integration, and autonomous driving development.
- **Mechanical systems in vehicles training**, mastered vehicle mechanical design, including reduction gears, differentials, and components to boost efficiency and performance.

**PT. Bringin Karya Sejahtera** | MEP AutoCAD Drafter Intern *Malang, Indonesia* | 07/2024 – 09/2024

- **Technical drafting expertise**, produced and revised 50+ precise MEP drawings in AutoCAD, ensuring compliance with project standards across various building types.
- **Electrical layout design**, designed and implemented electrical layouts with 100+ lights and 200+ outlets, optimizing functionality and energy efficiency in multi-floor projects.
- **Cross-functional collaboration**, collaborated with multidisciplinary teams on 15+ projects, incorporating client feedback and ensuring smooth design-to-execution coordination.

**GoldNation** | Facilitator *Bangkok, Thailand* | 05/2024 – 09/2024

- **Collaborative partnerships**, built partnerships with top institutions like Chulalongkorn University, Kasetsart University, Labtech Engineering, and the Indonesian Embassy to foster international collaboration.
- **Strategic promotion**, enhanced event visibility through Instagram ads, achieving a significant increase in social media engagement, with followers growing by over 20%.
- **Participant recruitment**, led a comprehensive recruitment process, encompassing CV screening, Focus Group Discussions (FGDs), and in-depth interviews to select highly qualified participants.

## ORGANIZATIONAL EXPERIENCE

**AERONAUTIKA BRAWIJAYA** | Mechatronics Engineer *Malang, Indonesia* | 06/2022 – 02/2025

- **Component analysis**, evaluated components for performance and cost-efficiency, aligning with project needs without compromising quality.
- **Mechanical design optimization**, designed an efficient mechanical system integrating all components seamlessly, optimizing airflow, ergonomics, and overall performance.

**IEEE UB SB** | Director of Educational Development *Malang, Indonesia* | 10/2023 – 11/2024

- **Strategic planning**, Planned and led 7+ educational initiatives, seminars, competitions, service programs, and research focused on maximizing participant impact.
- **Division system management**, developed structured workflows for proposals, committee setup, event execution, and final evaluations with accountability reports.
- **Project monitoring**, consistently tracked more than 7 progress events to ensure each event was executed effectively from inception to completion.

## PROJECTS

**Development of an Autonomous VTOL UAV Quadcopter with Vision AI-Based Payload System** 04/2024 – 10/2024

Responsible for designing and developing the mechanical frame, selecting electrical components, installing and assembling components on the UAV system, and tuning PID parameters to optimize flight stability and maneuverability

**Calcium Oxalate Reduction Technology in Porang Tuber Glucomannan Flour Using Mechanical Separation Vibrating Screen Method at CV. Wikonjac** [\[Patents\]](#) 02/2023 – 10/2023

Responsible for determining electrical components, installing and assembling components, and developing applications with IoT

**Calcium Oxalate Reduction Technology Using Electrocoagulation Extraction Method in Liquid Waste from the Porang Processing Industry** [\[Patents\]](#) 02/2023 – 10/2023

Responsible for determining electrical components, installing, and assembling components

**Modular Axial-Flux BLDC Motor Innovation for Unmanned Aerial Vehicles (UAV)** 05/2023 – 08/2023

Responsible for conceptualizing and designing the CAD model, assembling the motor structure, and conducting simulations to predict motor efficiency and performance.

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## LICENSE & CERTIFICATIONS

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**Brawijaya English Proficiency Test (523/677)** 02/2025

Issued by BEPT UB [\[Credential\]](#)

**Microsoft Office Desktop Application (Excellent Grade)** 02/2025

Issued by Trust Training Partners [\[Credential\]](#)

**New Energy Vehicle International Training Program** 11/2024

Issued by Beifang Automotive Education Centre [\[Credential\]](#)

**TensorFlow Developer Certificate** 04/2024

Issued by TensorFlow (Google) [\[Credential\]](#)

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## SKILLS

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<b>Technical Skills</b>	: Mechatronics, Electric Vehicle Systems, Industrial Automation, IoT, Machine Learning
<b>Software and Tools</b>	: Primavera P6, Cx-One, Arduino IDE, Python, TensorFlow, Inventor, AutoCAD, LTspice, Ansys Electrical Workbench, Kodular, Firebase
<b>Soft Skills</b>	: Strategic Leadership, Project Management, Efficient Time Management, Persuasive Communication, Expert Negotiation, Agility & Adaptability, Critical Thinking, Problem Solving
<b>Languages</b>	: Indonesian (Native), English (TOEFL 523), Mandarin (HSK 2)

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## ACHIEVEMENTS

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**Best Local Social Project**, NASA Hackathon [\[Certificate\]](#) 2024

**Finalist**, Kontes Robot Terbang Indonesia (KRTI) Nasional [\[Certificate\]](#) 2024

**1st Place**, National Scientific Writing Competition, Polines Weekend Technology [\[Certificate\]](#) 2024

**3rd Place** National Scientific Writing Competition, CARTS [\[Certificate\]](#) 2024

**Finalist**, Science Project and Innovation (INJECTION) [\[Certificate\]](#) 2024

**Funding Recipient**, PKM PI [\[Certificate\]](#) 2023

**Funding Recipient**, PKM KC [\[Certificate\]](#) 2023

**1st Place**, Airlangga Innovation Technology Competition [\[Certificate\]](#) 2023

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## EDUCATION

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**Brawijaya University**

Electrical Engineering | GPA 3.61/4.00

Malang, Indonesia | 2021 – 2025