Rezoan Ahmed Riam

Passport: B00563088 | **Work permit:** Bangladeshi | **Date of birth:** 24/09/2003 | **Place of birth:** Dhaka, Bangladesh | **Nationality:** Bangladeshi | **Phone number:** (+880) 01759844323 (Mobile) | **Email address:** riam2203004@stud.kuet.ac.bd | **Address:** Khulna-9203, Bangladesh, 9203, Khulna, Bangladesh (Khulna-9203, Bangladesh)

ABOUT ME

"Passionate Electrical and Electronic Engineering (EEE) student at Khulna University of Engineering and Technology, with strong skills in C/C++ programming, battery management systems, and Arduino. Experienced in tutoring physics, chemistry, and math, with a proven track record of academic excellence. Enthusiastic about innovation, problem-solving, and guiding students towards success."

WORK EXPERIENCE

10/03/2025 – CURRENT Khulna, Bangladesh

TEAM MEMBER KILO FLIGHT

1. **Design and Development:**
   - **Motor Design and Selection**: Choosing and designing electric motors suitable for the application (e.g., DC motors, AC motors, or permanent magnet synchronous motors).
   - **Battery Management**: Developing and integrating battery systems (such as lithium-ion batteries), including battery management systems (BMS), charge controllers, and balancing circuits.
   - **Power Electronics**: Designing and developing power electronics for efficient power conversion and distribution, such as inverters, converters (DC-DC, AC-DC), and control circuits.
   - **Thermal Management**: Designing systems to manage heat generation in motors, batteries, and power electronics, ensuring optimal efficiency and preventing overheating.
   - **Control Algorithms**: Developing and implementing control strategies (e.g., motor control, torque control) to ensure smooth operation of the powertrain system.
2. **Testing and Validation:**
   - **Performance Testing**: Conducting tests to verify that the powertrain components meet performance requirements (e.g., speed, torque, efficiency).
   - **Safety Testing**: Ensuring all electrical components meet safety standards, including voltage regulation, fault detection, and isolation of high-voltage components.
   - **Endurance and Reliability Testing**: Testing for long-term reliability and ensuring that the system works well under various operating conditions (e.g., varying temperatures, load conditions, and charge cycles).
   - **Battery Cycle Testing**: Verifying the performance of batteries under multiple charge and discharge cycles.
3. **Integration:**
   - **System Integration**: Ensuring that the various powertrain components (motor, inverter, battery, and controller) work seamlessly together within the overall vehicle or machine system.
   - **Communication Protocols**: Implementing and troubleshooting communication between different components using protocols like CAN (Controller Area Network) or other industry standards.
   - **Embedded System Programming**: Writing firmware for controllers, sensors, and other embedded systems within the powertrain to ensure efficient operation and integration with other vehicle systems.
4. **Optimization and Efficiency:**
   - **Powertrain Efficiency**: Working on methods to increase the energy efficiency of the powertrain, reducing energy losses in the motor, inverter, and battery systems.
   - **Regenerative Braking**: Developing or optimizing regenerative braking systems that convert kinetic energy back into electrical energy, improving overall efficiency.
   - **Weight and Size Reduction**: Designing components and systems that are compact and lightweight to improve overall performance (e.g., improving range or payload capacity).

5. **Documentation and Compliance:**
   - **Documentation**: Creating technical documentation for designs, tests, and system configurations. This includes schematics, reports, and user manuals.
   - **Standards Compliance**: Ensuring that all components and systems comply with relevant industry standards (e.g., ISO, UL, IEC) and regulations, including those for electrical safety and emissions.
6. **Collaboration and Project Management:**
   - **Team Collaboration**: Working with cross-functional teams, including mechanical engineers, software engineers, and other specialists to ensure the powertrain system integrates well with the vehicle's other systems.
   - **Project Management**: Managing timelines, budgets, and resources to meet project milestones and deliverables.

07/03/2025 – CURRENT Khulna, Bangladesh

TEAM MEMBER EMBEDDED HARDWIRE ENGINEERING TEAM P1

1. **Design and Development:**
   - **Circuit Design**: Designing schematics for embedded systems, including microcontroller circuits, sensors, actuators, and communication interfaces.
   - **PCB Design**: Creating and optimizing printed circuit boards (PCBs) for embedded systems to ensure proper integration and signal integrity.
   - **Component Selection**: Choosing the right components (e.g., microcontrollers, sensors, transceivers) based on system requirements and availability.
2. **Testing and Debugging:**
   - **Prototype Testing**: Assembling and testing prototype circuits, ensuring functionality and reliability.
   - **Troubleshooting**: Identifying and resolving hardware issues (e.g., power problems, signal integrity, faulty components).
   - **Debugging Tools**: Using oscilloscopes, logic analyzers, and multimeters to debug hardware circuits and ensure proper operation.
3. **Firmware Integration:**
   - **Hardware-Firmware Interaction**: Working closely with the firmware team to ensure smooth communication between hardware and software.
   - **Signal Processing**: Implementing signal conditioning, filtering, and communication protocols on the hardware level.
4. **Documentation and Compliance:**
   - **Design Documentation**: Creating detailed design documents, schematics, and layout files.
   - **Standards Compliance**: Ensuring that hardware meets regulatory standards (e.g., EMC, safety).
5. **Collaboration:**
   - **Cross-functional Teamwork**: Collaborating with software engineers, systems engineers, and other departments to integrate embedded systems into larger projects.
   - **Project Planning**: Contributing to project timelines, resource planning, and ensuring hardware components meet project deadlines.

19/10/2023 – 13/01/2025 Khulna, Bangladesh

TEACHER UDVASH

- Answered students' queries on physics, chemistry, and mathematics.
- Provided step-by-step solutions with conceptual clarity.
- Assisted students in problem-solving and exam preparation.
- Simplified complex topics for better understanding.
- Ensured timely responses to student doubts.

06/06/2023 – 09/02/2024 Dhaka , Bangladesh

TEACHER AMAR ONLINE COLLEGE

- Conducted online math sessions for students, focusing on core concepts and problem-solving.
- Provided personalized guidance and tutoring to help students improve their math skills.
- Created practice materials and assignments to reinforce learning.
- Offered exam preparation tips and strategies for better performance.
- Responded to student queries and provided detailed explanations for complex topics.

08/09/2023 – 04/09/2024 Dhaka, Bangladesh
DOUBT SOLVER RONON AND ACS

- Answered students' queries on physics, chemistry, and mathematics.
- Provided step-by-step solutions with conceptual clarity.
- Assisted students in problem-solving and exam preparation.
- Simplified complex topics for better understanding.
- Ensured timely responses to student doubts.

EDUCATION AND TRAINING

27/09/2023 – CURRENT Khulna, Bangladesh
BSC IN EEE khulna University of Engineering and Technology

Website https://www.kuet.ac.bd/ | **Level in EQF** EQF level 6

01/01/2020 – 01/12/2022 Dhaka, Bangladesh
GPA 5 WITH SCHOLARSHIP HSC

Website https://dhakacollege.edu.bd/ | **Level in EQF** EQF level 4

01/01/2019 – 03/03/2020 Dhaka, Bangladesh
GPA-5 SSC

Website https://akschoolandcollege.edu.bd/ | **Level in EQF** EQF level 3

01/01/2018 – 31/12/2018 Dhaka, Bangladesh
GPA 5 WITH SCHOLARSHIP JSC

Website https://akschoolandcollege.edu.bd/ | **Level in EQF** EQF level 2

01/01/2014 – 31/12/2014 Dhaka, Bangladesh
GPA-5 PECE

Website https://akschoolandcollege.edu.bd/ | **Level in EQF** EQF level 1

LANGUAGE SKILLS

Mother tongue(s): **BANGLA**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C2	C1	C1	C2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Digital Skills - Test Results

Information and data literacy	**ADVANCED**	Level 6 / 6
Communication and collaboration	**ADVANCED**	Level 6 / 6
Digital content creation	**ADVANCED**	Level 6 / 6

Safety	**ADVANCED** Level 5 / 6
Problem solving	**ADVANCED** Level 6 / 6

Results from self-assessment based on The Digital Competence Framework 2.1

HOBBIES AND INTERESTS

Reading

My reading habits revolve around technical and educational materials, particularly in electronics, physics, and engineering concepts. I focus on deepening my understanding of Electrical and Electronic Engineering (EEE), covering topics like microcontrollers, circuit design, power electronics, and communication protocols. I also explore books and resources related to mathematics and programming to strengthen my analytical skills. Additionally, I stay updated with research papers, online articles, and academic resources to enhance my knowledge and teaching abilities. My reading habits reflect my dedication to both learning and sharing knowledge through my educational platforms.

References aI am eager to contribute my skills and knowledge to a dynamic team, and I look forward to the opportunity to discuss how my experience aligns with your needs. References available upon request.

Khulna