#### SHAHID AHAMED HASIB

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LinkedIn, Google Scholar, Resume,

GitHub.

Address: Dhahran, 31261, Saudi Arabia.

## **INTERESTS**

System and Control, Robotics, Deep Learning, Aerospace, Power Systems, and Embedded Systems.

#### **EDUCATION**

### Rajshahi University of Engineering and Technology (RUET), Bangladesh

Feb 2017-Oct 2022

Bachelor of Science (BSc) in Mechatronics Engineering

CGPA: 3.69/4.00, Merit Position: 2<sup>nd</sup>

# **Undergraduate Thesis:**

Oct 2021-Oct 2022

<u>Title:</u> Li-ion Battery Remaining Useful Life Prediction Using Convolution Neural Network and Bat-optimizer. Supervisors: Dip Kumar Saha, Md. Firoj Ali

GPA: 4.00/4.00

## King Fahd University of Petroleum & Minerals

January 2024

Master of Science (MS) in Systems and Control Engineering.

### **WORK EXPERIENCES**

### Graduate Research & Teaching Assistant

January 2024

King Fahd University of Petroleum & Minerals

Supervisor: Dr. Adnan Shakoor

### INTERNSHIP AND TRAINING

**Banglalink** Digital Communications Limited.

Jan 2023-April 2023

**Infrastructure Service Management Department** Intern.

Worked with Power Architecture Management and Data Centre team. My team was responsible for ensuring continuous power supply in telecommunication site and data analysis.

**BSRM:** Bangladesh Steel Re-Rolling Mills Limited.

May 2019-Jun2019

**Industrial Training:** Production (SMS), Power, Electrical, Mechanical, PLC, and Automation sector. Worked on continuous casting machine and furnace process control with industrial PLC.

#### **PUBLICATIONS**

# Referred Journal Paper:

- 1. "A comprehensive review of available battery datasets, RUL prediction approaches, and advanced battery management". IEEE Access, Q1.
  - Review of Battery Management Systems and battery data sets that are commercially available.
  - Comprehensive analysis of Battery state estimation and RUL prediction approaches.

Link: https://ieeexplore.ieee.org/abstract/document/9454160

### Conference Papers:

- 1. "Driving Range Prediction of Electric Vehicles: A Machine Learning Approach".
  - EV driving range is predicted with machine learning models.
  - A novel ML based method of driving range prediction of EV is applied.

Link: <a href="https://ieeexplore.ieee.org/abstract/document/9667927">https://ieeexplore.ieee.org/abstract/document/9667927</a>

- 2. "Real-Time Recognition of Bangla Sign Language Characters: A Computer Vision Based Approach Using Convolutional Neural Network".
  - A Computer Vision-based model is proposed that can translate Bangla Sign Language into text.

Link: <a href="https://ieeexplore.ieee.org/abstract/document/9718800">https://ieeexplore.ieee.org/abstract/document/9718800</a>

### **PUBLICATIONS**

### Submitted Manuscript:

- 1. Hasib SA, Islam S, Ali MF, Md Mehedi Hasana, Saha DK, S. I. Moyeen. "Lithium-ion Battery Remaining Useful Life Prediction Using CNN with Bat Optimizer". (As First Author).
- 2. Sihab Uddin, Prangon Das, Sarafat H. Abhi, Anika Shama, Hasib SA, Islam S, Musfiq Alam, Maeenul A. Akhand, "Intelligent QR Code Based User Authentication System".
- 3. Hasib SA, Muhammad Majid Gulzar, A. Shakoor, "Electric Vehicle Driving Range Prediction: A Deep Learning Approach." (As First Author).

### POJECTS ACCOMPLISHED

1. Mars Rover Project: Team Name: "Team-Ogrodoot"

Nov 2018-Dec 2019

- Designing the mars rover and simulation. Circuit Design and Control.
- During the 2019 edition, I lead the Mechanical crew of the "Team-Ogrodoot".

Link: https://www.facebook.com/ogrodoot.ruet

2. Deep Learning Based Detection System: A computer vision project.

Mar-2022

- Developed a deep learning-based detection system.
- The system is built with CNN and public data sets.

GitHub: https://github.com/ShahidHasib586/OpenCV\_Projects\_Face-and-Object-Detection

3. Humanoid Robot Prototype (Arduino, Raspberry Pi):

April 2017-Dec 2019

Under the observation of department of Mechatronics Engineering of RUET.

- Manipulator Design with servo mechanism.
- Integrating sensors, use voice module, and AI to generate voice feedback.

Link: <a href="https://shahidhasib586.wixsite.com/shahid-ahamed-hasib/projects">https://shahidhasib586.wixsite.com/shahid-ahamed-hasib/projects</a>

4. Line Following Robot, Battle Bot, Arduino Based Rader System.

Jun 2017-Sept 2019

- Participated into many national robotic competitions.
- Working on PCB board, designing bots using SolidWorks.

GitHub: https://github.com/ShahidHasib586/LFR-Battle-Bot-Arduino-Based-Radar-Syatem

5. Authentication System.

Jan 2022-Oct 2022

An intelligent QR Code Based User Authentication System using Raspberry Pi.

- Designing the system, taking Data through the webcam and developing the model.
- Generating QR code using Python "qrcode" library.

GitHub: <a href="https://github.com/ShahidHasib586/User-Authentication-System">https://github.com/ShahidHasib586/User-Authentication-System</a>

# **TECHNICAL SKILLS**

**Programming Languages** Python, C, C++

AI Machine Learning, Deep learning, Machine Vison

**Design Software** SolidWorks, AutoCAD, Blender3D

**Typesetting** LaTeX

HardwarePLC, Micro-Controller, ArduinoSimulation and ModellingProteus, Simulink, MATLAB

Graphics Design, Editor Illustrator, Movavi, After Effects, Audacity

### ACADEMIC HONORS AND ACHIEVEMENTS

**Certificate of Academic Excellence** 

2018-2022

Issued by RUET Mechatronics Engineering Department for securing the first position.

• Technical Board Scholarship (4 times)

2017–2020

For securing top position in the class with an outstanding academic performance

High Publication Award

2020–2021

By RUET Mechatronics Engineering Department, for publishing Q1 rank journal paper.

# ACADEMIC HONORS AND ACHIEVEMENTS

•	Indian Rover Challenge, <u>IRC</u>	2018
	Position: 6 <sup>th</sup> , at <u>VIT</u> , Vellore, India. Participated as a team member of " <u>Team-Ogrodoot</u> "	
•	European Rover Challenge, <u>ERC</u> ,	2018-2019
	Place 25 <sup>th</sup> (2018), 26 <sup>th</sup> (2019), Kielce University of technology, Kielce, Poland.	
•	Best Poster Presentation Award	2022
	First Runner-up, at MTE Day, Issued by <u>RUET</u> Mechatronics Engineering Department.	
•	Citations of publications: 124, Google Scholar	
EXT	RA-CURRICULAR ACTIVITIES	
•	Organizing Secretary, Robotic Society of RUET, RSR	2019–2022
	Responsibilities includes: organizing national robotic events, organizing technical	
	events, workshops, participating into various national robotic competitions.	
•	Organizer, "Robotronics 2019", and "Robotronics 2.0", A robotic fair includes	2019–2022
	various robotic events: Robo Wrestling, Rover, Speed Battle, and many other events.	
•	Organizer and Participant, "Esho Robot Banai", a national technical event.	2019
•	Mechanical Team Lead, Responsibilities includes: leading the team and	2019
	designing, conducting research. "Team-Ogrodoot", Mars Rover Team.	
•	Trainer "Blender", Society of Computer Aided Designers of RUET, <u>SCADR</u>	2019
	teaching 3D modelling in Blender3D, designing various mechanical components.	
•	Member of "Onuronon", participating into cultural events RUET Cultural Club.	2018–2022
•	Vice President, "Greater Noakhali Association", RUET	2021
•	Others: Guitar Playing, Playing Chess, Sketching.	
PRO	FESSIONAL CERTIFICATIONS	
•	Machine Learning, Offered by Stanford University, Coursera	2022
•	Deep Learning Specialization, Coursera	2022
•	Machine Learning with python, A-Z, <u>Udemy</u>	2021
•	Machine Learning for All, Coursera	2020
•	Google IT Support Professional Certificate, Google, Coursera	2020
•	AI For Everyone, Coursera	2020
•	<b>Pre-Programming: Everything You Need To Know Before You Code, Udemy</b>	2019
•	Programming for Everybody, (Getting Started with Python), Coursera	2019
•	PHP Programming Language, SoloLearn	2018
REF	ERENCES	

# Md. Firoj Ali

Head, Mechatronics Engineering

Rajshahi University of Engineering & Technology.

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# **Dip Kumar Saha**

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