Alamin
Contact Information
Email: alamin20.ice@gmail.com,
Phone No: +8801887-1717127.

CAREER OBJECTIVES

To work in a challenging environment where I can utilize my academic knowledge, programming skills, and research abilities in the fields of Web Engineering, IoT, Machine Learning, and Embedded Systems to contribute to the development of innovative technologies.

EDUCATION

Bachelor of Science in Engineering 2023 (held in 2025)	Department of Information & Communication Engineering, Pabna University of Science and Technology, Pabna-6600, Bangladesh. Result: 3.74 Scale of 4.0
H.S.C 2018	A. Rouf Degree College, Dakbangla Bazar, Jhenaidah. Group: Science, Board: Jessore Result: 4.33 (Scale of 5.0)
S.S.C 2016	Bazar Gopalpur School and College, Jhenaidah. Group: Science, Board: Jessore Result: 4.5 (Scale of 5.0)

RESEARCH INTEREST

- Embedded System
- Machine & Deep Learning
- Signal & Image Processing

- IoT
- Artificial Intelligence
- PCB design and 3D Printing

RESEARCH EXPERIENCE

- Designed and implemented a microcontroller-based system for automated AC load control (Embedded Systems–based AC Device Controller).

- Developed an IoT-based dynamic product price display system for retail services.

- Developed a deep multi-layer perceptron model for human activity recognition using the UCI-HAR dataset.

- Applied YOLOv8 for highway traffic vehicle detection and classification.

- Designed and tested a radio-controlled aircraft for safety surveillance and emergency transportation under PUST research funding (2022–23).

SKILLS

- Programming Languages: Python, C, C++, Java, MATLAB
- Web & Tools: HTML, CSS, PHP, ASP.NET
- Database: SQL, MySQL
- Platforms & OS: Windows, Ubuntu, Fedora
- Embedded & IoT: Arduino, MikroC, Embeded, Esp32, Esp8266
- Others: PCB design and Printing, Circuit Desing, Microsoft Office, NS2, YOLOv8, Latex, Cisco Packet tracer.

LANGUAGE SKILLS

Bengali   **:** Native.
English   **:** Proficient in listening, reading, writing, and presentation.

PUBLICATIONS

[1] Md. Anwar Hossain, Sajeeb Kumar Ray, Naima Islam, **Alamin**, Mirza AFM Rashidul Hasan. (2024). "Enhanced human activity recognition through deep multi-layer perceptron on the UCI-HAR dataset", International Journal of Advances in Applied Sciences, p-ISSN 2252-8814, e-ISSN 2722-2594. Vol. 13, No. 2, pp. 429–438. https://doi.org/10.11591/ijaas.v13.i2.pp429-438.

[2] N. Islam, S. K. Ray, M. A. Hossain, M. A. Rashidul Hasan, **Alamin** and M. B. Al Zabir Shammo, "Vehicle Classification and Detection Using YOLOv8: A Study on Highway Traffic Analysis," 2024 International Conference on Recent Progresses in Science, Engineering and Technology (ICRPSET), Rajshahi, Bangladesh, 2024, pp. 1-4, doi: 10.1109/ICRPSET64863.2024.10955913.

[3] **Alamin**, S. K. Ray, M. A. Hossain, M. A. R. Hasan, N. Islam and M. M. A. Hossain, "Embedded Systems-Based AC Device Controller," 2024 International Conference on Recent Progresses in Science, Engineering and Technology (ICRPSET), Rajshahi, Bangladesh, 2024, pp. 1-6, https://doi.org/10.1109/ICRPSET64863.2024.10955881.

[4] S. K. Ray, Ariful Islam, M. C. Chanda, N. Islam, M. A. Hossain, M. A. R. Hasan, **Alamin**, "Deep Learning Based Lung Image Segmentation Using XR-U-Net," *2024 27th International Conference on Computer and Information Technology (ICCIT)*, Cox's Bazar, Bangladesh, pp. 2659–2664, 2024. https://doi.org/10.1109/ICCIT64611.2024.11022346 .

PROJECT & THESIS

1. 3rd Year 2nd Semester Project
   Title: IoT Based Smart Product Price List Display Board [Accepted and presented at the ICCIT Conference, 2025]

2. Undergraduate Thesis
   Title: Design and Implementation of an ATmega328P-Based Smart Protection System for Water Pump Motors with Inrush Current Control and Timer Integration. [Under review in the Journal of Electrical Engineering]
3. Web Project
   - **Suzit Special Batch** – suzitspecialbatch.com
     Developed an educational website for managing online classes and student resources using PHP, MySQL, and JavaScript.
   - **Masud Physics** – masudphysics.com
     Designed and deployed a physics learning platform with content management, class schedules, and resources for students.

ACHIEVEMENTS & AWARDS

- ➢ **Merit Scholarship - 3rd Position** - Awarded for academic excellence in the Department of Information and Communication Engineering, Pabna University of Science and Technology.
- ➢ **Top 5 Team Award - FOREWARN Disaster Hackathon 2.0** - Recognized as one of the top 5 teams for designing an innovative IoT display system. The hackathon, organized by FOREWARN Start Network Bangladesh, focused on building AI-driven humanitarian solutions for disaster management in collaboration with the University of Dhaka and various international organizations.
- ➢ **IEEE Project Presentation** - Successfully presented the IoT-based smart product price display system at an IEEE Project Presentation in Pabna University of Science and Technology.
- ➢ **IPM School Training Certification** - Completed professional training in Integrated Pest Management (IPM) methodologies, enhancing knowledge in agricultural technology and sustainable practices.
- ➢ **Precise Energy Olympiad 2025** - Successfully qualified for and participated in both the preliminary and final stages of the Precise Energy Olympiad 2025, a competitive mathematics, chemistry, and physics olympiad for students in the Rooppur NPP Region, demonstrating strong analytical and problem-solving abilities.

EXTRA-CURRICULAR ACTIVITIES

- ➢ Volunteer, Madhuhati Publician Association
  Madhuhati, Sadar, Jheanidah
  August 2021 – December 2021
  - Assisted in COVID-19 vaccine registration for local people as part of community service.
- ➢ ICT-Related Editor, Jhenaidah Publican Association
  Pabna University of Science and Technology
  From 07 March 2023 to 13 May 2024.

- Responsible for managing ICT-related content and communications.
- Contributed to digital event management, publication design, and online engagement.

➢ Hall Student Representative, Swadhinata Hall
Pabna University of Science and Technology
October 2024 – December 2025.

- Representing students in hall activities and administrative coordination.

PERSONAL INFORMATION

Full name	:	Alamin
Father's name	:	Nazim Uddin
Mother's name	:	Feroza Khatun
Date of birth	:	20 October, 1999
Nationality	:	Bangladeshi
Religion	:	Islam
Sex	:	Male
Blood group	:	"O" positive
Present address	:	Swadhinata Hall, Pabna University of Science and Technology.
Permanent address	:	Village: Shamnagor, Post Office: Bazar Gopalpur, Union: Madhuhati, Subdist: Sadar Jhenaidah, Dist: Jhenaidah, Bangladesh.

TEACHING EXPERIENCE

AL AMIN (YouTube Channel)
Channel Link: www.youtube.com/@ALAMIN-ab

- Possess over 3 years of teaching experience, delivering both theoretical and problem-solving-based instruction.
- Experienced in preparing lecture materials, conducting interactive classes, and supporting students' academic development through online and offline platforms.

REFERENCES

DR. MD. ANWAR HOSSAIN
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Department of Information and Communication Engineering
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Tarun Debnath
Assistant Professor
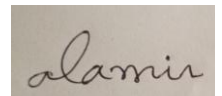Department of Information and Communication Engineering
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DECLARATION

I hereby declare that the information provided above is true and correct to the best of my knowledge.

Signature