

Hasan Zohirul Islam

Machine Learning Engineer

Contact Information

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LinkedIn, GitHub, Google Scholar



Professional Summary

Innovative and results-driven machine learning engineer with a robust background in electrical and electronic engineering. Proficient in leveraging advanced technologies such as IoT, AI, and deep learning to develop impactful solutions for diverse industries, including healthcare, agriculture, and industrial automation. Experienced in project management, from literature review to model deployment, with a proven ability to enhance system performance and security. Demonstrated leadership in both academic and professional settings, coupled with a commitment to continuous learning and application of cutting-edge technologies. Passionate about solving complex problems and optimizing processes through data-driven insights and machine learning techniques.

Work Experience

Advanced Chemical Industries Limited (ACI Limited)

Dhaka, Bangladesh

Machine Learning Engineer

September 2023 – Present

- Vehicle Entry-Exit Monitoring System: Designed and implemented a deep learning-based system using an IP camera to identify and log incoming and outgoing trucks, enhancing security and logistics management.
- Face Recognition System: Developed a robust face recognition system (Web-based service) using FaceNet, showcasing high accuracy in facial identification.
- Performance Monitoring System of Field Forces: Implemented a system to analyze field force performance and forecast sales goals, improving decision-making.

Analytics for Cyber Defense (ACyD) Lab, Florida International University

Miami, Florida, USA

Graduate Research Assistant

March 2023 – June 2023

- Research Topic: Adversarial attack on distributed deep learning models in edge devices.

Adorsho Pranisheba

Dhaka, Bangladesh

Machine Learning Engineer

July 2021 – November 2022

- Cattle Face Recognition System: Developed a system using FaceNet for insurance purposes.
- Cattle Monitoring System: Developed embedded systems for cattle monitoring.

Sajida Foundation

Dhaka, Bangladesh

Intern

September 2020 – December 2020

Pi Labs Bangladesh Ltd.

Dhaka, Bangladesh

Embedded System Developer

2018 – 2019

Education

Bangladesh University of Engineering & Technology (BUET)

Bachelor's Degree, Electrical and Electronic Engineering

2016 – 2021

- CGPA: 2.97/4.00

Notre Dame College

Higher Secondary Certificate

2013 – 2015

- GPA: 5.00/5.00

Ideal School and College

Secondary School Certificate

2011 – 2013

- GPA: 5.00/5.00

Publications

- Islam, H. Z., Khan, S., Paul, S. K., Rahi, S. I., Sifat, F. H., Sany, M. M. H., Sarker, M. S. A., Anam, T., Polas I. H. (2024). **Muzzle-Based Cattle Identification System Using Artificial Intelligence (AI)**. (arxiv)
- Sarker, M. S. A., Anwar, M. S., Islam, H. Z., Alam, M. R., & Reefat, H. I. (2022). **Possible use of seaweed (*Gracilaria tenuistipitata* Var. *Liui*) to the reduction of enteric methane emissions from dairy cattle**. Veterinary Research Notes, 2(11), 78-78. (Researchgate Article)

Skills

Programming Languages: Python, MATLAB, C++, C

Machine Learning & AI: PyTorch, TensorFlow

Tools & Frameworks: FastAPI, Flask, Atmel Studio, Proteus

Specializations: Computer Vision, Signal Processing, Time Series Analysis

Languages

Bengali (Proficient), English (Proficient)

Hobbies

Reading, Traveling, Musical Instruments, Rubik's Cube, Puzzles

Leadership & Extracurricular Activities

Associate General Secretary, Satyen Bose Science Club, BUET (2017 – 2018)

Academic Team Member, Bangladesh Mathematical Olympiad Committee (2015 – 2016)

President, Ideal Science and Technology Aiming Research Council (2012 – 2013)

Achievements

Champion, Datathon 3.0, organized by Robi Axiata Limited (2024)

Champion, MATLAB Contest, Chittagong University of Engineering and Technology (February 2020)

First Runner Up, Divisional Math Olympiad, Bangladesh Mathematical Olympiad Committee (January 2012)

Champion, Divisional Math Olympiad, Bangladesh Mathematical Olympiad Committee (December 2011)

References

Dr. Md. Aynal Haque
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Dr. Celia Shahnaz
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