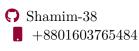
# Md Shamimul Islam

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♦ https://shamim-38.github.io/

in shamim435 Scholar





# **Research Interests**

Computer Vision (CV) | Natural Language Processing (NLP) | Machine Learning (ML) | Biometrics

# **Employment History**

2024 – · · · ·	<b>Lecturer</b> , Department of Computer Science and Engineering (CSE), Manarat International University (MIU).
2023 - 2024	Lecturer, Department of CSE, Asian University of Bangladesh (AUB) Convener, AUB Programming Club.
2022 - 2022	Adjunct Faculty, Department of Islami Studies (DIS), MIU
2020 - 2022	Adjunct Faculty, Department of CSE, MIU.

### Education

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2020 - 2022	Masters in Applied Statistics and Data Science, Jahangirnagar University(JU) CGPA: 3.96 out of 4.00 Thesis title: Image-based Bangla Sign Language Recognition using Deep learning Algorithms.
2015 – 2020	B.Sc. Computer Science, Manarat International University.
	CGPA: 3.99 out of 4.00
	Thesis title: Pose-based Multi-level Features Fusion For Exam Cheat Recognition Using CNN.

# **Research Publications**

### Peer-Reviewed Publications (Total Citation: 59 | h-index: 3 | i10-index: 2)

**M. S. Islam**, A. J. M. A. Joha, N. Hossain, M. M. Hasan, and S. Abdullah, "Word level bangla sign language dataset for continuous bsl recognition," in *2024 IEEE The 6th International Conference on Activity and Behavior Computing*, Nakatsu and Kitakyushu, Kyushu, Japan, 2024.

**M. S. Islam** and I. Elwarfalli, "Deep learning-powered ecg-based biometric authentication," in *IEEE International Conference on Next-Generation Computing, IoT and Machine Learning (NCIM)*, DUET, Dhaka, Bangladesh, 2023. *O* DOI: 10.1109/NCIM59001.2023.10212845.

N. H. M. Arafat, S. Ileas, Mujazid, and **M. S. Islam**, "Blosecr: A conceptual framework of identity documents' security on blockchain in refugee issues and conserving fundamental rights," in *The International Conference for Intelligent Technologies*, Karnataka, India, 2022. *P* DOI: 10.1109/CONIT55038.2022.9847731.

**M. S. Islam**, M. M. Hasan, and S. Abdullah, "A deep spatio-temporal network for vision-based sexual harassment detection," in *IEEE International Conference on Emerging Technology in Computing, Communication and Electronics*, 2021. *O* DOI: 10.1109/ETCCE54784.2021.9689891.

M. M. Hasan, **M. S. Islam**, and S. Abdullah, "Robust pose-based human fall detection using recurrent neural network," in *IEEE International Conference on Robotics, Automation, Artificial-Intelligence and Internet-of-Things*, Dhaka, Bangladesh, 2019. *O* DOI: 10.1109/RAAICON48939.2019.23.

#### Datasets



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S. Abdullah, **M. S. Islam**, and M. M. Hasan, *Bangladeshi vehicle license plate dataset*, Public Dataset, Dataset available at https://github.com/Mahedi-61/Bangla\_License\_Plate\_Dataset, 2024.

M. S. Islam and M. M. Hasan, *Sexual harassment video dataset (shvd)*, Public Dataset, Dataset available at https://github.com/Shamim-38/Sexual-Harassment-Video-Dataset-SHVD-, 2024.

A. J. M. A. Joha, M. N. Hossain, **M. S. Islam**, S. Abdullah, and M. M. Hasan, *Multi-view bangla sign language (mv-bsl) dataset*, Public Dataset, Dataset available at https://github.com/Mahedi-61/MV-BSDL, 2024.

### **Research Projects**

2024	<b>AI Career Counselor &amp; Guidance Platform:</b> Leveraging the LLaMA AI model, this project develops a sophisticated AI-driven platform that provides personalized IT career guidance, inspired by "Interactive Advising Bot" and "ChatCounselor." It offers tailored career roadmaps, educational resources, and labor market insights, supported by an extensive dataset of 8,000 data points from leading educational and job platforms. Current enhancements focus on expanding data integration and enhancing interactive capabilities to better support IT professionals' career development.
	<b>Detection of Phishing URLs for Secure Browsing:</b> A machine learning system has been developed to detect phishing URLs. We've explored Logistic Regression, Random Forest, SVMs, and Neural Networks for classification, along with feature selection techniques for optimal performance. Trained on a vast dataset, this system promises high accuracy and a boost to online security by flagging fraudulent attempts.
2022	<b>A Real-time Bangla Sign Language Translation System:</b> Working on a project to develop a pose-based Bangla sign language translation system to help deaf people for effective communication. A novel transformer architecture has been proposed to model temporal descriptors of the sign videos to Bangla sentence. A short version of this work has been won in Artificial Intelligence for Bangla Competition 2.0.
2022 - 2022	<b>Bangla Social Network Post Analysis using Deep learning:</b> Working on a project to develop a real-time language model which is able to categorize ruling government post and anti-government post along with toxic level. For this work, we have collected a dataset and then using this dataset we plan apply a transformer to build the model.
2018 - 2019	<b>A Real-time Bangla Sign Language Translation System:</b> Leveraging a Bangladeshi license plate dataset, we developed a real-time ALPR system and presented it at an IEEE conference in 2019.

### Skills

Languages	Strong reading, writing and speaking competencies for Bengali and En- glish.
Coding 📕	Java, php, Python, C, R, sql, xml/xsl.
System Administration	Unix/Linux, Windows
Document Processing	LATEX, MS Office
Developer Tools	Git, Google Cloud Platform
Libraries	NumPy, OpenCV, Pandas, Matplotlib
AI Framework	TensorFlow, PyTorch
Object Detection Algorithms	YOLO, RetinaNet, Mask R-CNN

# Skills (continued)

Pose Detection Algorithm

- OpenPose, MediaPipe
- Academic research, teaching, training, consultation, Large typesetting and publishing.

#### **Miscellaneous Experience**

Misc.

#### Awards and Achievements

- **Winner of AI for Bangla 2.0 Competition:** As team leader, we secured the position in winner list in the national-level AI For Bangla 2.0 competition in 2023, which was directed by the Bangladesh Government, leading a team in developing an innovative AI solution for the Bangla sign language. Competition involved more than a hundred teams.
- 2020 Islamic Development Bank (IsDB) Masters Scholarship: Received the highly competitive IsDB Scholarship in 2020, awarded to outstanding students pursuing graduate studies in Master of Science. Scholarship valued at \$6,000.
- 2018 University Merit Scholarship: Due to placement in the top 1% of students in the institute, tuition fees were waived in undergraduate studies.

#### Certification

2015 **Champion** in Great Victory Day Essay Competition. Awarded by Manarat International University.

#### **Co/Extracurricular Activities**

2020	<b>Elected President</b> at MIU CSE Club, Manarat International University, Ashulia, leading depart- ment's students in organizing events and activities to promote interest in the field of computer science and and organized some successful events, such as MIU CSE Fest 2020, Intra university programming contest and so on.
2017	<b>Co-founder</b> at Hasimukh (Smile), a social welfare organization established in Rangpur, Bangladesh, working to support the underprivileged people in Bangladesh.
2018	<b>Participant</b> at The ICPC Bangladesh IUBAT NCPC National Programming Contest, Dhaka, Bangladesh.
2019	<b>Participant</b> at Hackathon, organized by Google Developer Group (GDG) Sonargaon, Dhaka, Bangladesh.
2022	<b>Invited Speaker</b> at Webinar on A Publication Road Map for Scientific Papers, organized by MIU CSE club, MIU, Ashulia.
2019	<b>Organizing Member</b> at Code Camp organized by MIU CSE Club, Manarat International University, Ashulia.

### References

#### Prof. Dr. Shahjahan Khan

Vice Chancelor & Professor Asian University of Bangladesh, Ashulia, Dhaka. Emeritus Professor, University of Southern Queensland, Toowoomba, Australia Email: vice-chancellor@aub.ac.bd Phone: +8801678664402 Prof. Dr. Md. Mijanur Rahman Professor & Dean, School of Engineering, Science& Technology (SEST) Head, Department of CSE Manarat International University, Ashulia, Dhaka Email: head\_cse@manarat.ac.bd Phone: +880 1402-796321