

Zahid Islam

AI Software Developer @ Siemens with Expertise in LLMs, Multimodal AI, and Computer Vision

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in [linkedin.com/in/zahid58](https://www.linkedin.com/in/zahid58)

📍 Saskatoon, Canada

Professional Experience

AI Software Developer, [Siemens EDA](#)

📍 Saskatoon, Canada

📅 July 2025 – Present

- Actively developing Fuse EDA AI Agent (showcased at NVIDIA GTC '26) for intelligent automation across chip design workflows.
- Collaborating with NVIDIA to integrate and customize (finetune) Nemotron models for agentic EDA workflows.
- Lead the integration of multimodal LLMs into existing system allowing retrieval and generation from documents with images.
- Developed on-premise model training and finetuning tool built on *transformers* library for training EDA-specialized models.

Graduate Teaching Assistant, [University of Saskatchewan \(USask\)](#)

📍 Saskatoon, Canada

📅 Sept 2023 – Present

- Courses TA'ed: CMPT 270 - Developing Object-Oriented Systems, CMPT 214 - Programming Principles and Practice.

Lecturer, Dept. of CSE, [Islamic University of Technology \(IUT\)](#)

📍 Dhaka, Bangladesh

📅 July 2021 – Aug 2023

- Courses Instructed - Machine Learning Lab, Digital Signal Processing (DSP), Algorithm Engineering, Structured Programming.

Machine Learning Engineer, [Apurba Technologies Ltd.](#)

📍 Dhaka, Bangladesh

📅 March 2021 – June 2021

- Developed and maintained a web-based Bengali text recognition application in collaboration with cross-functional teams.

Research Experience

[\[google scholar\]](#)

Research Interests: Multimodal LLMs, AI, Computer Vision.

[1] Z. Islam, M. Rochan, **AdaptMerge: Inference Time Adaptive Visual and Language-Guided Token Merging for Efficient Large Multimodal Models**, Empirical Methods in Natural Language Processing (EMNLP 2025)- Findings. [\[paper\]](#)

[2] Z. Islam, S. Paul, M. Rochan, **Test-Time Adaptation for Video Highlight Detection Using Meta-Auxiliary Learning & Cross-Modality Hallucinations**, IEEE/CVF Winter Conference on Applications of Computer Vision (WACV 2026). [\[paper\]](#)

[3] Z. Islam, S. Paul, M. Rochan, **Unsupervised Video Highlight Detection by Learning from Audio and Visual Recurrence**, IEEE/CVF Winter Conference on Applications of Computer Vision (WACV 2025). [\[paper\]](#)

[4] Z. Islam, S. Paul, M. Rochan, **Test-Time Adaptation for Video Highlight Detection**, Neural Information Processing Systems (NeurIPS) 2024 Workshop: Self-Supervised Learning - Theory and Practice.

[5] Z. Islam, S. Paul, M. Rochan, **Leveraging Audio and Visual Recurrence for Unsupervised Video Highlight Detection**, Neural Information Processing Systems (NeurIPS) 2024 Workshop: Self-Supervised Learning - Theory and Practice.

[6] Z. Islam, M. Ruk., R. Ahmed, H. Kabir, M. Farazi, **Efficient Two-Stream Network for Violence Detection Using Separable Convolutional LSTM**, International Joint Conference on Neural Networks (IJCNN) 2021, Shenzhen, China. [\[paper\]](#) [Cited by: 114]

Education

M.Sc. in CS, [University of Saskatchewan \(USask\)](#)

📍 Saskatoon, Canada

📅 Sept 2023 – June 2025

- Courses: Deep Learning (97%), Image Processing & Computer Vision (93%)

- Supervisor - Dr. Mrigank Rochan

B.Sc. in CSE, [Islamic University of Technology \(IUT\)](#)

📍 Dhaka, Bangladesh

📅 Jan 2017 – March 2021

- Cumulative GPA: 3.99/4.0, Ranked 1st in a class of 86

- Supervisor - Dr. Md. Hasanul Kabir

Technical Skills

- Proficient in designing, training, and analyzing deep learning models and applications on **PyTorch** and **Tensorflow**.
- Proficient in programming and problem-solving using algorithms & data structures. 500+ solves in Codeforces & LeetCode.
- Programming - **Python, C++, C, Java** • ML toolkits - **PyTorch, Scikit-learn, OpenCV** • UI - **PyQt, HTML, CSS, JS**

Scholarships & Awards

- **Geddes Graduate Scholarship, USask**: in recognition of academic excellence in master's program in the amount of \$2,500.
- **USask Student Travel Award**: covering travel to the conference Neural Information Processing Systems (NeurIPS) 2024.
- **OIC Scholarship**: covering 3 out of 4 years of undergraduate studies at IUT by Organization of Islamic Cooperation (OIC).
- **European Rover Challenge (ERC), Poland**: 14th position in the robotics competition, European Rover Challenge 2018, with IUT Mars Rover. Worked on arduino-based robotic arm manipulation and object detection using image processing.

Projects

[\[github.com/zahid58\]](https://github.com/zahid58)

- **PoseGL**: Skeletal Animation of an OpenGL graphical model using 3D Pose Estimation from RGB video. [Python, C++, OpenGL](#)
- **PaligemmaVQA**: Trained Paligemma vision large language model (LLM) on a video question-answering dataset. [JAX, Tensorflow](#)
- **EasyScan**: An Interactive OCR Whiteboard GUI App with real-time handwritten text recognition. [Python, PyQt, OpenCV](#)

Organizational and Voluntary Activities

- **Volunteer, Google Developer Groups**: Organizing tech workshops to connect local community with latest technologies.
- **VP Social, Computer Science Graduate Council**: engaged in organizing departmental events for the CS department at USask.