# Zahidul Islam

#### Graduate Student in Computer Science | Specializing in AI and Machine Learning

zahidislam1558@gmail.com

**L** +1 306 880 8013

in linkedin.com/in/zahid58

Saskatoon, Canada

### Education

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

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

B.Sc. in CSE, Islamic University of Technology (IUT)

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

#### Saskatoon, Canada

🛗 Sept 2023 - Present

• Supervisor - Dr. Mrigank Rochan

**♀** Dhaka, Bangladesh

# Jan 2017 - March 2021

• Supervisor - Dr. Md. Hasanul Kabir

## **Professional Experience**

## Graduate Teaching Assistant, University of Saskatchewan (USask)

Saskatoon, Canada

Espt 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, Algorithm Engineering Lab, Digital Signal Processing, 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.
- Implemented efficient deep neural networks (eg. EAST, CNN) for detecting words and characters from document images.

Publications [google scholar]

Research Interests: Multimodal Deep Learning, Computer Vision, NLP.

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

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

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

[4] 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: 77]

#### **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]

- PoseGL: Skeletal Animation of an OpenGL graphical model using 3D Pose Estimation from RGB video. Python, C++, OpenGL
- CropsDetector: Object Detection for Crops and Weeds Identification from Agricultural Images Using YOLO. Python, PyTorch
- EasyScan: An Interactive OCR Whiteboard GUI App with real-time handwritten text recognition.

Python, PyQt, OpenCV

#### Online Certifications

 $\bullet \ \ \textbf{Deep Learning Specialization}, \textbf{Tensorflow Developer Specialization}, by \ \textit{Deep Learning.Al}, \ \textit{coursera.org}.$ 

April 2020

[verify]

• Machine Learning, by Andrew Ng, Stanford University, coursera.org.

Aug 2019

# Organizational and Voluntary Activities

- VP Social, Computer Science Graduate Council: engaged in organizing departmental events for the CS department at USask.
- Organizer, IUT ICT Fest: organized a national programming contest and managed 120 teams from different universities.