## CONTACT INFORMATION

Phone: +8801965287811

Email: towsif.chowdhurv@northsouth.edu Website: <a href="https://towsif13.netlify.app/">https://towsif13.netlify.app/</a> Additional Resources: Github, LinkedIn

### RESEARCH INTEREST

My primary field of research interest is Artificial Intelligence (AI). Within AI, I am interested in problems related to Computer Vision, Artificial Neural Networks, and Reinforcement learning. In particular, my research incorporates problems related to machine learning and deep learning.

## **EDUCATION**

January 2017 - April 2021

# Bachelor of Science in Computer Science and Engineering

North South University (NSU)

Dhaka, Bangladesh

- CGPA 3.60/4.00
- Specialized Trail Artificial Intelligence

### WORK EXPERIENCE

October 2021 - Present

### Lab Officer

Department of Mathematics and Physics, North South University Dhaka, Bangladesh

- Independently teach 3 undergraduate lab classes
- Provide consultation to students
- Assist in the preparation of lab manuals
- Responsible for grading and marking the students in their lab classes

October 2021 - Present

## Graduate Teaching Assistant (GA)

Department of ECE, North South University

- Dhaka, Bangladesh
  - Facilitate a discussion section or tutorial; hold weekly office hours; grade homework, programming assignments, exams, or projects; prepare answer keys or supplementary notes
  - Assisting faculty with record keeping, such as tracking attendance and calculating grades

May 2021 - Present

## Graduate Research Assistant (GRA)

Department of ECE, North South University Dhaka, Bangladesh

- Designing algorithms based on experience replay memory and catastrophic forgetting for autonomous agents
- Development of code and experimental platforms, running experiments and analyzing data using machine learning

## **Undergraduate Teaching Assistant (UGA)**

Department of ECE, North South University Dhaka, Bangladesh

- Facilitate a discussion section or tutorial; hold weekly office hours; grade homework, programming assignments, exams, or projects; keep records; distribute and copy reading materials; prepare answer keys or supplementary notes
- Assisting faculty with record keeping, such as tracking attendance and calculating grades

## RESEARCH EXPERIENCE

- Youme, S. K., Chowdhury, T. A., Ahamed, H., Abid, M. S., Sohrawardi, R. B., & Siddique, S. (2021). RER: Recycled Experience Replay, Blending Oldest Memories with Recent Selective Experiences to Improve Remembering. (Work-in-Progress)
- Youme, S. K., Chowdhury, T. A., Ahamed, H., Abid, M. S., Chowdhury, L., & Mohammed, N. (2021). Generalization of Bangla Sign Language Recognition using Angular Loss Functions. *IEEE Access*, 1–1. doi:10.1109/ACCESS.2021.3134903

### **GRANTS**

Name of Grant CTRG 2021-2022

Grant offered by North South University, Dhaka, Bangladesh

Project Title High performance less resource-intensive Deep Reinforcement Learning methods for

applications in autonomous agents and search and rescue robotics

Grant amount BDT 500,000

Role Research Assistant

## **TECHNICAL SKILLS**

Programming Languages Python, Java, C

Familiar with C++, CSS, HTML, SQL, Assembly, LateX, MATLAB, Flutter

Operating Systems Windows, Linux

**Libraries** PyTorch, Tensorflow, Pandas, Scikit-learn

**Database Tools** Firebase, MySQL

Others Machine learning, Deep learning, Data Science, Android Development

### LANGUAGE PROFICIENCY

**IELTS** 8.0 (L-9, R-7, W-6.5, S-8.5)

### REFERENCES

#### Shahnewaz Siddique, Ph.D

Assistant Professor, Department of Electrical and Computer Engineering, North South University Email: shahnewaz.siddique@northsouth.edu

### Nabeel Mohammed, Ph.D

Assistant Professor, Department of Electrical and Computer Engineering, North South University

Email: nabeel.mohammed@northsouth.edu