

# Towsif Alam Chowdhury

Curriculum Vitae

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## CONTACT INFORMATION

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Website: <https://towsif13.netlify.app/>

Additional Resources: [Github](#), [LinkedIn](#)

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## 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.

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## 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

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## 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

September 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

January 2020 - August 2021

## 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

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- 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

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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

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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

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

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### 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