

# Mominul Islam

📞 Phone: (+880) 179 594 8308    ✉ Email: mominul.islam05@northsouth.edu    🌐 Website: mominul-ssv.github.io

🎓 Google Scholar    🆔 ORCID    🐙 GitHub    🔗 LinkedIn

## Education

<b>BSc</b>	<b>North South University</b> , Computer Science and Engineering	Jan. 2019 – Jun. 2023
	<ul style="list-style-type: none"><li>• CGPA: 3.86/4.00 (<math>\approx</math>Top 4%)</li><li>• Distinction: Summa Cum Laude</li><li>• Major Courses:<ul style="list-style-type: none"><li>– Machine Learning</li><li>– Natural Language Processing</li><li>– Pattern Recognition &amp; Neural Network</li></ul></li></ul>	

## Experience

<b>Intern</b>		Mar. 2024 – Jun. 2024
Business Systems		3 months
Beximco Communications Limited		
<b>Graduate Assistant</b>		Jul. 2023 – Jun. 2024
Department of Electrical and Computer Engineering		11 months
North South University		
<b>Undergraduate Assistant</b>		Feb. 2022 – Jun. 2023
Department of Electrical and Computer Engineering		1 year 4 months
North South University		

## Publications

<b>CosSIF: Cosine similarity-based image filtering to overcome low inter-class variation in synthetic medical image datasets, *Mominul Islam</b> , Hasib Zunair, Nabeel Mohammed	Mar. 2024
<i>Computers in Biology and Medicine</i>	
Paper: <a href="https://doi.org/10.1016/j.combiomed.2024.108317">doi.org/10.1016/j.combiomed.2024.108317</a>   Code: <a href="#">GitHub</a>   IF: 7.7 (Q1)	

## AI/ML Projects

<b>Fine-Tuned the Pre-Trained T5 Transformer Model for Context-to-Question Generation</b>	Jan. 2024
<ul style="list-style-type: none"><li>• Code: <a href="#">Kaggle</a></li><li>• Model: <a href="#">Hugging Face</a></li><li>• ML Domain: Text Generation, Sequence-to-Sequence Modeling</li></ul>	
<b>Fine-Tuned the Pre-Trained mT5 Transformer Model for Abstractive Bengali Text Summarization</b>	Jun. 2023
<ul style="list-style-type: none"><li>• Code: <a href="#">GitHub</a></li><li>• ML Domain: Text Summarization</li></ul>	
<b>Image-to-Image Translation via GAN to Address Class Imbalance</b>	Sep. 2022
<ul style="list-style-type: none"><li>• Ref. Code: <a href="#">GitHub</a></li><li>• ML Domain: Generative Adversarial Networks</li><li>• GAN Architecture: Nvidia's StyleGAN2-ADA</li></ul>	

## Skin Lesion Classification Using Cross-Stage CNNs and Transformers

Aug. 2022

- Ref. Code: [GitHub](#)
- ML Domain: Binary & Multi-Class Image Classification
- Models: ConvNeXt, Swin-Transformer, ViT

## Heart Disease Detection Using Machine Learning

Jul. 2022

- Code: [GitHub](#)
- ML Domain: Binary Classification
- Algorithms: Logistic Regression, Random Forest, Decision Tree, KNN, Naive Bayes

## Honors and Awards

---

**2022, 50% tuition waiver:** in recognition of academic performance at North South University.

**2020, 25% tuition waiver:** in recognition of academic performance at North South University.

## Skills

---

**Programming Languages:** Python, C/C++, Java

**Simulation Software:** Logisim, Proteus

**Frameworks / Libraries:** PyTorch, TensorFlow, LangChain, Scikit-learn

**Development Platforms:** Colab, Kaggle, AWS ML

**Version Control:** GitHub, Git

**Web:** HTML, CSS, JavaScript, SQL

**Miscellaneous:** LaTeX

## Languages

---

**Bengali:** Native

**English:** Proficient

**IELTS,** Overall: 7.0 | Speaking: 7.5, Reading: 7.5, Writing: 7, Listening: 6.5 | [Certificate](#)

Oct, 2023

## Certificates

---

**2022** Coursera, Deep Learning Specialization, Neural Networks and Deep Learning; Grade: 97% | [Certificate](#)

## References

---

### Dr. Nabeel Mohammed

Associate Professor  
Department of Electrical and Computer Engineering  
North South University  
Dhaka, Bangladesh  
Email: [nabeel.mohammed@northsouth.edu](mailto:nabeel.mohammed@northsouth.edu)  
Contact Number: (+880) 172 050 5591

### Dr. Mohammad Ashrafuzzaman Khan

Assistant Professor  
Department of Electrical and Computer Engineering  
North South University  
Dhaka, Bangladesh  
Email: [mohammad.khan02@northsouth.edu](mailto:mohammad.khan02@northsouth.edu)  
Contact Number: (+880) 175 257 6450