Mominul Islam

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

🎓 Google Scholar   ⓘD ORCiD   GitHub   in LinkedIn

Education

BSc **North South University**, Computer Science and Engineering   Jan. 2019 – Jun. 2023

- CGPA: 3.86/4.00 ($\approx$Top 4%)
- Distinction: Summa Cum Laude
- Major Courses:
  - Machine Learning
  - Natural Language Processing
  - Pattern Recognition & Neural Network

Experience

Intern   Mar. 2024 – Present
Business Systems
Beximco Communications Limited

Graduate Assistant   Jul. 2023 – Present
Department of Electrical and Computer Engineering   7 months
North South University

Undergraduate Assistant   Feb. 2022 – Jun. 2023
Department of Electrical and Computer Engineering   1 year 4 months
North South University

Publications

CosSIF: Cosine similarity-based image filtering to overcome low inter-class variation   Mar. 2024
in synthetic medical image datasets, ***Mominul Islam***, Hasib Zunair, Nabeel Mohammed
Computers in Biology and Medicine
Paper: doi.org/10.1016/j.compbiomed.2024.108317 ⧉ | Code: GitHub ⧉ | IF: 7.7 (Q1)

AI/ML Projects

Fine-Tuned the Pre-Trained T5 Transformer Model for Context-to-Question Generation   Jan. 2024
- Code: Kaggle ⧉
- Model: Hugging Face ⧉
- ML Domain: Text Generation, Sequence-to-Sequence Modeling

Fine-Tuned the Pre-Trained mT5 Transformer Model for Abstractive Bengali Text Sum-   Jun. 2023
marization
- Code: GitHub ⧉
- ML Domain: Text Summarization

Image-to-Image Translation via GAN to Address Class Imbalance   Sep. 2022
- Ref. Code: GitHub ⧉
- ML Domain: Generative Adversarial Networks
- GAN Architecture: Nvidia's StyleGAN2-ADA

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 ↗
Contact Number: (+880) 172 050 5591

Dr. Mohammad Shafiul Alam
Professor
Department of Electrical and Electronic Engineering
Dhaka University
Dhaka, Bangladesh
Email: alam.shafiul@northsouth.edu ↗
Contact Number: (+880) 172 684 9575