

Nazia Tasnim

📍 Boston, MA, USA ✉ Email ❤ website 🎓 Nazia Tasnim 🌐 appledora

EDUCATION

BOSTON UNIVERSITY

PHD IN COMPUTER SCIENCE

ADVISOR: [DR. BRYAN PLUMMER](#)

2023-present | Boston, MA.

SHAHJALAL UNIVERSITY OF SCIENCE & TECH.

BS IN COMPUTER SCIENCE

2017-2021 | Sylhet, Bangladesh.

CGPA: 3.70 / 4.00

Major GPA: 3.97 / 4.00

SELECTED PROJECTS

mwtokenizer 
mwparserfromhtml 
Shaako 
SUSTCast 

SELECTED AWARDS

- **CRA-WP** Grad Cohort Fellowship
- **BU GSAS** Dean's Fellowship
- **Outreachy Fellow** - March'22 Cohort
- Second Runner-up in **CVPR AI City Challenge** Track-4

RESEARCH INTERESTS

- Parameter-efficient FT
- Neural Architecture Search
- Multimodal representation + Continual Learning
- AI for Social Good + Bias Mitigation through Domain adaptation
- Knowledge augmentation, retrieval, & Knowledge-guided learning

RELEVANT SKILLS

Python, Pytorch, Keras, OpenCV, PySpark, Flask, Java

REFERENCE

DR. SAJJADUR RAHMAN

SENIOR RESEARCH SCIENTIST |

MEGAGON LABS

Mountain View, CA 94041

EXPERIENCE

IVC-ML GROUP, BU | RESEARCH ASSISTANT

Sep 2023 – Present | Boston, MA.

- Developing **probes and attacking techniques** to analyze biases in **LVLMS**
- Building **parameter-sharing schemes** for efficient continual learning across modalities

BENGALI.AI | RESEARCH AFFILIATE

Sep 2021 – Present | Dhaka, BD.

- Coordinate teams and lead research projects focused on the NLP landscape of Bangla and other indigenous languages of Bangladesh
- Launched **Google-funded Kaggle competitions** and inter-university DL contests
- Developed some of the **largest benchmarking Bangla DL resources**

WIKIMEDIA FOUNDATION | RESEARCH DEVELOPER

Sep 2022 – June 2023 | SF, USA.

- Collaborated with Wikimedia's research team to **develop NLP tools** for 300+ languages in 100+ wiki projects
- Created extensive research pipeline to **curate community resources** from wiki projects, develop assets through analysis, build models and off-the-shelf tools to be used across all wiki research

GIGA TECH LTD. | MACHINE LEARNING ENGINEER

Aug 2021 – June 2022 | Dhaka, BD.

- Developed NLP submodules for the **National Syntactic Treebank**
- Created pipelines for **Part-of-Speech (PoS)**, **Named Entity Recognition (NER)** and **language model training**
- Assisted in establishing annotation guidelines for diverse downstream tasks

PUBLICATIONS

VISION-LLMS CAN FOOL THEMSELVES WITH SELF-GENERATED TYPOGRAPHIC ATTACKS | Preprint

- Developed **typographic attacks** for different VLMs
- Performed result analysis and code curation

OOD-SPEECH: A LARGE BENGALI SPEECH RECOGNITION DATASET FOR OUT-OF-DISTRIBUTION BENCHMARKING | Interspeech, 2023

- Built the **benchmarking pipeline** using Whisper, WAV2Vec2, and Conformer
- Performed **spectral analysis** on the speech corpus and identified distribution clusters

VISTA: VISION TRANSFORMER ENHANCED BY U-NET & IMAGE COLORFULNESS FRAME-FILTRATION FOR RETAIL CHECKOUT |

Proceedings of IEEE/CVF Conference on CVPR, 2022

- Developed the preprocessing and post-processing pipelines, for **robust Frame analysis from real-time video**
- Collaborated on **model benchmarking and result analysis** across 3 different SOTA architectures
- Obtained **3rd rank** globally, in real-time retail object detection from out-of-distribution synthetic training data.