Khondoker Ittehadul Islam

NLP MASTERS STUDENT

Education ____

University of Groningen, Universität des Saarlandes

Netherlands & Germany

MASTER'S IN NATURAL LANGUAGE PROCESSING, LANGUAGE SCIENCE & TECHNOLOGY

2024 - Now

- Courses: Advanced NLP (9.2/10), Deep Learning Practicals (8.0/10).
- · Research Project: Reasoning on LLMs.
- Research output: https://arxiv.org/pdf/2508.08933.
- · CGPA: 7.7/10

Shahjalal University of Science and Technology

Sylhet, Bangladesh

2017 - 2021

- B.Sc. (ENGG.) IN COMPUTER SCIENCE AND ENGINEERING
- Thesis: mBERT in low-resource language.
 It resulted in two publications.

Publications ____

- Khondoker Ittehadul Islam, Gabriele Sarti; Reveal-Bangla: A Dataset for Cross-Lingual Multi-Step Reasoning Evaluation. *Under Review* at BLP workshop @ IJCNLP-AACL 2025. ■
- Khondoker Ittehadul Islam, Sudipta Kar, Md Saiful Islam, Mohammad Ruhul Amin; SentNoB: A Dataset for Analysing Sentiment on Noisy Bangla Texts. Findings of EMNLP 2021.

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- Khondoker Ittehadul Islam, Tanvir Hossain Yuvraz, Md Saiful Islam, Enamul Hassan; EmoNoBa: A Dataset for Analyzing Fine-Grained Emotions on Noisy Bangla Texts. AACL-IJCNLP 2022.

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Professional Experience _____

2024 - 2025 **Research Scholar**, University of Groningen

- · Analyzed LLM reasoning across languages, generation strategies, and parameter scales.
- · Applied NLI, RAG, translation, and attribution techniques in cross-lingual evaluation.
- · Identified that different languages emphasize distinct steps of the same reasoning chain.
- Publications: Submitted at BLP workshop @ IJCNLP-AACL 2025 and on-going.

2025 - 2025 **Research Scholar**, University of Groningen

- Improved linguistic capabilities of vLMs for the OCR task.
- · Composited image to augment ancient documents.
- Reduced image resolution through page-separation preprocessing.
- Report: https://arxiv.org/pdf/2508.10356

2025 - 2025 **Research Scholar**, University of Groningen

- · Leveraged emotional cues in debate speech for fallacy detection.
- Mapped tonal emotion values into textual representations to improve comprehension of audio features.
- Report: https://arxiv.org/pdf/2509.11127

2022 - 2022 **Research Scholar**, Fordham University

- · Created a Bangla fake news dataset by collecting source articles.
- · Performed manual annotation with explanatory justifications.

2019 - 2021 Research Scholar, Shahjalal University of Science & Technology

- Evaluated the performance of encoder-only models on low-resourced Bangla language.
- · Developed a corpus-level generalization metric.
- Designed an algorithm to assess annotation quality of 80+ annotators.
- These works were done with SUST NLP Research Group.
- Publications: Findings of EMNLP 2021 2, AACL-IJCNLP 2022 2

2021 - 2024 **Software Engineer**, REVE Systems

- · Project Details:
- · Automating the administrative workflow process of Bangladesh Transport Ministry.
- · Modules include Vehicle Maintenance, Human Resource Management, Bill and Budget Management, and more.
- · Roles & Responsibility:
- · Communicating with clients and incorporating their requirements.
- · Notable Implementations:
- · Developed administrative benchmark reports for business modules using data structures and algorithms.
- · Improved operational insights related to inventory and incident through various analytics.
- The project is in production: https://www.gems.gov.bd/.

Hackathons _____

2024 **3rd Turku Technical Hackathon 2**, RESPONSE

Participated to automate PV energy minimization at the residential scale.

Skills

Technical Stack Python, R, PyTorch, HF's Transformers, vLMs, Git, Slurm

Research ToolKit Seaborn, t-SNE, inSeq, ContextCite, LogitLens

Research Stack Paper Reviewing, Academic Writing, Grant Writing, Project Management

Development Stack Spring Boot, Hibernate, React, Redis, CI/CD, RESTful APIs, Distributed System

Awards

2025 Best NLP Student Project Award, @GroNLP, CLCG

Competed with 7 student teams in conducting and producing quality research.

2025 **LxMLS Scholarship**, Google & Zendesk

Received expenses to participate in Lisbon Summer School.

2025 Erasmus+ Scholarship, Erasmus Mundus

Stipend to support students in their traineeship.

2024 **NL Scholarship**, Nuffic, Dutch Ministry of Education, Culture, and Science

Grant to support researchers in Master's program.

2024 **Consortium Scholarship**, Erasmus Mundus

Received reduced annual program fee for Joint Master's Degree students.

2023 **Outstanding Reviewer**, BLP Workshop @ EMNLP 2023

Provided feedback to assist program chairs and to help authors in improving their work.

2021 Student Travel Scholarship, EMNLP 2021

Received expenses to attend the conference.

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2024-2025 **Programme Committee Member**, ReMa Linguistics, CLCG, University of Groningen Represented student cohort and provided insights on course structure to the Dutch Education Ministry.

Complementary Education _____

- 2025 **15th LxMLS Summer School**, Instituto Superior Técnico (IST)

 Courses: Learning with Linear Models, Introduction to Sequence Models, Pretrained Transformer Models, Causality
- 2025 **Erasmus Mundus LCT Summer School 2025**, DFKI & Saarland University

 Workshops: Low-Resource Machine Translation, Interpreting Transformer Internals with Sparse Auto-encoders
- 2025 **ASML Student Excursion Day**, ASML HQ
 Day-long hands-on event at the ASML Headquarters.
- 2020 **Fundamental of Reinforcement Learning**, Alberta Machine Intelligence Institute via Coursera (University of Alberta)

 An online non-credit course authorized by University of Alberta, Alberta Machine Intelligence Institute and offered through

 Coursera. CREDENTIAL ID: VYBJSWD5UKCH