

Tonmoy Talukder

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Portfolio: <https://tonmoytalukder.github.io/>

LinkedIn: <https://www.linkedin.com/in/tonmoytalukder>

GitHub: <https://github.com/TonmoyTalukder>

Education

- **Bachelor in Science, Computer Science & Engineering** | (2018-2023)
Ahsanullah University of Science & Technology, Dhaka

Experience

Mentor | Technovation

December, 2021 – Present

Mentoring students for AI development Project for participate international Tech competition named Technovation Girls Challenge.

Research Paper

- **Rank Your Summaries: Enhancing Bengali Text Summarization via Ranking-based Approach**
(Accepted in BIM 2023)
December, 2022 – March, 2023 (First Author)
 - I have applied some Bengali text summarization models to generate summary.
 - Used a BERT text ranker generated the best summary.
 - Applied ensemble approaches. And compared their results.
- **Bengali Key-to-Text: Text Generation from Keywords in Bengali using Pre-trained Transformers**
(Under Review in EMNLP 2023)
March, 2023 – June 2023
 - This is a solo research work under my supervisor. I have developed a keyword extractor using BERT.
 - I trained T5 that can generate caption from sentence.
- **Vision2Cap: Bengali Caption Generation from Images using Pre-trained Transformer (Ongoing)**
July, 2023 – Present
 - This is also a solo research work under my supervisor.
 - I am currently working on the development of a pretrained transformer-based model aimed at detecting objects in the Bangla language and generating image captions in Bangla.
- Additional research insights can be found in: <https://tonmoytalukder.github.io/research>

Skills

Programming Language: Python, JavaScript, C++, SQL (msSQL), Markup Language (HTML, CSS)

Frameworks: Pytorch, Tensorflow, React JS, Node JS, Next JS, Material UI, Tailwind CSS

Tools: Jupyter Notebook (Anaconda 3), Colab, VS Code, Git, Firebase, Chrome Dev Tools

Projects

- [Bengali Hate Speech Classification](#) – NLP Classification with different machine learning algorithms with hyperparameter fine tuning, Ensemble approaches
- [Diabetes-Prediction Analysis](#) – Seven algorithms with hyperparameter fine tuning, Ensemble approaches
- [Churning-Telecom-Company-Prediction](#) – One-hot Encoding, Decision Tree Classification, Grid Search & Cross-Validation, Confusion Matrix, Classification report, and ROC-AUC
- [Test Cricket Analysis](#) – Pandas, Numpy
- [Audi Used Car EDA](#) – Jupyter Notebook, Pandas, Numpy, Matplotlib
- BookPedia – C#, JavaScript, ASP.NET, React JS, A social media with some features like: book upload, online book reading, Review blog writing
- The Niketan (MERN Full Stack) – JavaScript, React Js, Node Js, FireBase Authentication
- Additional project insights can be found in: <https://tonmoytalukder.github.io/projects>

Activities

- Intra Aust Programming Contest – 2019 (7th Position, Junior Division)
Ahsanullah University of Science & Technology, Dhaka
- Makers' Mania – Programming Contest – 2018 (4th Position, Junior Division)
Independent University Bangladesh, Dhaka

Additional

Language Competencies: English (Professional working proficiency), Bangla (Native), Hindi (Full working proficiency)

Research Interest: Multimodal Deep Learning, Natural Language Processing, Computer Vision, Human Computer Interaction, Machine Learning

Data Science Skill: Data Analysis, Data Visualization, ML & Deep Learning Model Training

Certification: Data Visualization, Analysis & Machine Learning with Python by EMK Center, Data Science Track by DataCamp (Ongoing), Complete Web Development (MERN) by Programming Hero

Additional Experience: Exploratory Data Analysis, Competitive Programming, MERN Stack Web Development (Full Stack)

Reference

Mr. G. M. Shahariar, Lecturer
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Ahsanullah University of Science and Technology
Email: shahariar_shibli.cse@aust.edu
Web: <https://shahariar-shibli.github.io/>

Sidratul Moontaha, The Diana Award Holder 2021
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Chapter Ambassador, Technovation AI
Ambassador, NVIDIA AI
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