Mohammad Nazmush Shamael

252, Elephant Road, Dhaka, Bangladesh
+8801521438665
md.nazmush.shamael@gmail.com
Nazmush-Shamael
Mohammad Nazmush Shamael

Education

2018 - 2022 **BSc. in CSE,** Graduated **Summa Cum Laude**,
United International University, *Dhaka, Bangladesh*
CGPA: 3.97 out of 4.00

2023 - present **MSc. in CSE**,
United International University, *Dhaka, Bangladesh*

Experience

June 2022 - July 2023 **Software Engineer**, *Enosis Solutions*, *Dhaka, Bangladesh*

November 2021 - June 2022 **Undergraduate Assistant**, *Dept. of Computer Science & Engineering, UIU*, *Dhaka, Bangladesh*

Publications

[1] Md Tarek Hasan, Arifa Akter, **Mohammad Nazmush Shamael**, Md Al Emran Hossain, HM Mutasim Billah, Sumayra Islam, and Swakkhar Shatabda. **Adaptive Tabu Dropout for Regularization of Deep Neural Networks**. In *International Conference on Neural Information Processing*, pages 355–366. Springer, 2022.

[2] Md Tarek Hasan, **Mohammad Nazmush Shamael**, Arifa Akter, Md Al Emran Hossain, HM Mutasim Billah, Sumayra Islam, Swakkhar Shatabda, and Salekul Islam. **Deep Learning Based Peer Review Aggregation of Scientific Articles**. *Under review*.

[3] Md Tarek Hasan, **Mohammad Nazmush Shamael**, Arifa Akter, Rokibul Islam, Md Saddam Hossain Mukta, and Salekul Islam. **An Artificial Intelligence-based Framework to Achieve the Sustainable Development Goals in the Context of Bangladesh**. *arXiv preprint arXiv:2304.11703*, 2023.

[4] **Mohammad Nazmush Shamael**, Sabila Nawshin, Swakkhar Shatabda, and Salekul Islam. **BanglishRev: A Large-Scale Bangla-English and Code-mixed Dataset of Product Reviews in E-Commerce**. *Under review*.

Major Research works

Capstone Thesis **Deep Transfer Learning Based Peer Review Aggregation and Meta-review Generation for Scientific Articles**

- Automated the process of meta-review generation and providing acceptance decision in academic and scientific conferences.
- For the acceptance decision prediction, word embedding techniques were used along with various traditional machine learning model.
- For the meta-review generation, transfer learning approach were used along with various inference models

Research work **Adaptive Tabu Dropout for Regularization of Deep Neural Networks**

- Two methods to improve the Tabu dropout mechanism is proposed for training deep neural networks.
- Tabu Tenure Dropout: Select how many epochs a single neuron is prohibited from being dropped after being dropped once.
- Adaptive Tabu Tenure Dropout: we dynamically select which Tabu Tenure to use during the training stage to get the optimum results. This algorithm allows for harnessing the full potential of the Tabu Tenure Dropout through adaptively choosing the best suited Tabu Tenure for the train data.

Curated Dataset **BanglishRev: A Large-Scale Bangla-English and Code-mixed Dataset of Product Reviews in E-Commerce** *Work in progress*

- Collection of product meta-data and reviews of over 1 million products.
- Products contain 1,747,043 written reviews which include reviews in both Bangla and English.
- Products distributed in a total of 796 unique categories organized in a 3-tier tree structure.

Research work **An Artificial Intelligence-based Framework to Achieve the Sustainable Development Goals in the Context of Bangladesh**

- Analyze the influence of AI on three pillars of sustainable development: society, environment, and economics.
- Did In-depth case study on Impact of AI on sustainable development in four distinct sectors: : agriculture, waste management, water management, and heating, ventilation, and air conditioning (HVAC) systems.
- Proposed AI-based framework to accomplish sustainable growth in the afore-mentioned sectors.

Curated Dataset **PeerConf: A dataset for peer review aggregation**

- Collection of peer reviews collected with permission from conference chairs.
- Contains peer reviews from 5 different scientific conferences.
- The dataset aims to facilitate research and development in areas such as peer review analysis, decision prediction, and summarization while maintaining anonymity and privacy of authors and reviewers.
- Consists of 3242 peer reviews from 1236 papers.
- The dataset can be utilized for training machine learning models to predict acceptance decisions and testing machine learning models for peer review summarization.

Research work **Skin disease classification model for Bangladeshi patients**

- Tried a transfer learning approach to classify a skin disease dataset.

Honors & Awards

Champion UIU CODERS COMBAT 2.0 (category: Sophomore)

Champion UIU CSE Project Show (Software Engineering)

Second runner-up UIU CODERS COMBAT (category: Sophomore)

3rd position UIU CSE Project Show (Hardware Category)

Merit Scholarship Received merit scholarships in eleven out of thirteen trimesters for excellent result in UIU

Skills

Language: C, C++, C#, Python, Java, JavaScript, CSS

Web Development: PHP, Django, .NET

Database: MySQL, MS SQL

Machine Learning: Keras, Pytorch, Scikit-learn

References

Dr. Swakkhar Shatabda
Professor
Department of CSE
BRAC University
Email: swakkhar.shatabda@bracu.ac.bd

Dr. MD. Saddam Hossain Mukta
Associate Professor
Department of CSE
United International University
Email: saddam@cse.uiu.ac.bd