Md. Shahidul Salim

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🌐 https://huggingface.co/shahidul034
🌐 https://shahidul034.github.io/My-portfolio-website/
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Job Experience

July 2022 – Present	**Lecturer,** Department of CSE, Khulna University of Engineering & Technology (KUET),Bangladesh
April 2021 – March 2022	**Lecturer,** Department of CSE, Uttara University, Bangladesh

Education

2016 – 2021	**B.Sc. in Computer Science and Engineering,** Khulna University of Engineering & Technology (KUET),Bangladesh – **CGPA** 3.86 out of 4.00 (4th position in my department)

Research Publications

Journal Articles

1. Ashiqussalehin, M., Jahan, K. N., Rahaman, M. A., & Salim, M. S. (2022). Human abnormal behavior detection using convolution neural network. *Specialusis Ugdymas*, *1*(43), 4076–4083.

Conference Proceedings

1. Hossain, L., Hossain, I., Salim, M. S., Raju, S. M. T. U., & Saha, J. (2023). A novel technique for classification of motor imagery eeg signal based on deep learning approaches. In *Proceedings of the 2nd international conference on big data, iot and machine learning (bim 2023)*. (Accepted).

2. Promi, R. T. H., Nazri, R. A., Salim, M. S., & Raju, S. M. T. U. (2023). A deep learning approach for non-invasive hypertension classification from ppg signal. In *2023 international conference on next-generation computing, iot and machine learning (ncim)* (pp. 1–5).
   🔗 doi:10.1109/NCIM59001.2023.10212940

3. Salim, M. S., Islam, M. T., Zannat, R., Mia, N., Fuad, M., & Murad, H. (2023). Towards developing a transformer-based bangla typing error correction model: A deep learning-based approach. In *International conference on information and communication technology for sustainable development (icict4sd-2023)*. (Accepted).

4. Salim, M. S., Murad, H., Das, D., & Ahmed, F. (2023). Banglagpt: A generative pretrained transformer-based model for bangla language. In *International conference on information and communication technology for sustainable development (icict4sd-2023)*. (Accepted).

5. Ahmed, T., Hossain, S., Salim, M. S., Anjum, A., & Azharul Hasan, K. M. (2021). Gold dataset for the evaluation of bangla stemmer. In *2021 5th international conference on electrical information and communication technology (eict)* (pp. 1–6). 🔗 doi:10.1109/EICT54103.2021.9733662

6. Salim Shakib, M. S., Ahmed, T., & Azharul Hasan, K. M. (2019). Designing a bangla stemmer using rule based approach. In *2019 international conference on bangla speech and language processing (icbslp)* (pp. 1–4). 🔗 doi:10.1109/ICBSLP47725.2019.201533

Ongoing Research and Thesis Supervision

Under Review

- An Applied Statistics Dataset for Human vs AI-Generated Answer Classification
- Bangla Emergency Post Classification on Social Media using Transformer-Based BERT models
- Agricultural Recommendation System based on Multivariate Weather Forecasting Model
- Detecting AI-Generated Assignments in Educational Evaluation: A Transformer-Based Approach

Ongoing Research

- Building a Bangla Text Summarization Dataset for Transformer Models: A Comprehensive Guide
- Automatic Text Summarization in Bengali: A Study on the Effectiveness of the mT5 Transformer Model
- Bangla token classification using transformer model
- Bangla context-based question answering with custom dataset using transformer model
- Bangla Masked language model using transformer model
- A transducer-based Bangla stemmer using Bangla lexicon
- Automatic Text Summarization in Bengali: A Study on the Effectiveness of the mT5 Transformer Model
- Correction of Bangla sentences with Guruchondali Dosh

Thesis Supervision

- Towards Developing a Transformer-based Bangla Typing Error Correction Model: A Deep Learning-based Approach
- Correction of Bangla sentences with Guruchondali Dosh
- KUET chatbot by checking semantic similarity

Awards and Projects

Awards

- Dean's Award by Faculty of Electrical & Electronic Engineering (1st year,2nd year, 3rd year,4th year)
- Vocational Scholarship form Khulna University of Engineering & Technology (2016-2020)
- 3rd Prize in Poster representation, KUET (2019)

Projects

- **Medical LLM Chatbot** - Chat with pdf using LLM(LlamaV2) langchain and streamlit
- **KUET Chat Bot** - Information about KUET.
  – Students can chat with the bot and get information about KUET.
- **Efficient Backlog Routine Generator** - Building with Python and Flask for Streamlined Task Management
- **Secure File Locker** - Implementing RSA Encryption Algorithm with Python and Flask for Data Protection
- **Daily Expense Management on iOS** - A User-Centric Mobile Application for Efficient Financial Tracking
- **Anonymity-Preserving Post Web Application** - Implementing Python and Flask for Secure and Confidential Content Sharing
- **Windmill Simulation** - A Computer Graphics Project Implemented in C++

Awards and Projects (continued)

- **Booklist** - A Mobile Application for Academic Booklists at Khulna University of Engineering & Technology (KUET) across Various Departments with PDF Links to the Books
- **Statistics exam** - Design and Implementation of a Statistics Exam Generation System for Students using Python and Flask with Randomized Data Generation
- **Smart Home Automation with IoT** - Integrating NodeMCU (ESP8266) with Python and Flask
- **Counterfeit note detection** - Fake Bangladeshi Banknote Detection using Convolutional Neural Networks (CNN)
- **Hello OS** - Simple operating system project using grub and qemu
- **Brain Tumor Detection using Convolutional Neural Networks (CNN)** - An AI-based Approach for Accurate Diagnosis
- **Fake Bangladeshi Currency Detection** - A Comparative Analysis using OpenCV and MATLAB
- **Building a Social Media Website** - Harnessing HTML, CSS, JavaScript, ASP.NET, and C# for Dynamic Online Interaction

Online Courses

- Natural language processing (NLP) using libraries from the Hugging Face ecosystem – Transformers, Datasets, Tokenizers, Accelerate and Hugging Face Hub
- LangChain- Develop LLM powered applications with LangChain(Udemy)
- Supervised Machine Learning: Regression and Classification
- NLP - Natural Language Processing with Python(Udemy)
- Hands-On Natural Language Processing (NLP) using Python(Udemy)
- Probability and Statistics for Business and Data Science(Udemy)

Miscellaneous Experiences

- Ibex(Supercomputer) fine-tune LlamaV2 for medical data

Internship

2019 - Workshop on iOS at Nascenia.

Voluntary Experience

2017-2019 - Dream (Voluntary Blood Donation Society of KUET).

2018 - Volunteer in Bitfest 2019 arranged by CSE association.

- Research paper review(Worked as reviewer for the conference AAAI-2024).

Technical Skills

Programming Languages

Python	HTML
C	CSS
C++	LaTeX
Java	Javascript

Technical Skills (continued)

Python Frameworks

- Scikit-learn
- Tensorflow
- Keras
- Pytorch
- Matplotlib
- Transformer

Modern AI

- Natural Language Processing
- Machine Learning
- Deep Learning
- Data Analysis
- Data Visualization