

Md Ataulha Saim

Konapara, Demra, Dhaka 1362

+880-1879-093418 | ataullha00@gmail.com | <https://ataullha.github.io>

[GitHub](#) | [LinkedIn](#)

EDUCATION

Shahjalal University of Science and Technology

Bachelor of Science in Computer Science and Engineering

Feb. 2019 – Feb. 2024

CGPA: 3.72/4.00 (till 7th semester)

Notre Dame College, Dhaka

Higher Secondary School Certificates

Jun. 2016 – Jan. 2018

GPA: 5.00/5.00

WORK EXPERIENCE

Synesis IT PLC | *AI Engineer*

March 2024 - Present

- Working with NLP and Speech
- Improved SIT-ASR capabilities to correctly handle OOV English words

RESEARCH EXPERIENCE

Forecasting Dengue Cases | *Time Series Analysis, Prophet Model*

- Accepted in the Computers in Biology and Medicine (Elsevier) Journal, Impact Factor: 7.7
- Co-authored a section by Implementing Meta Prophet model for Dengue time series data, focusing daily cases forecasting.

Low-Resource Text-to-Speech Synthesis (Thesis) | *TTS, VITS-TTS*

- Developing a large TTS corpus of more than 15 hours for Sylheti Nagri language under the supervision of Prof. Dr. M. Shahidur Rahman.
- Implemented CVAE architecture based VITS-TTS model.

Real-time Object Detection | *YOLOv8*

- Led the creation of the largest Bangladeshi bird image dataset for real-time detection by implementing YOLOv8 as the baseline model.
- Published at ICCIT 2023
- DOI: [10.1109/ICCIT60459.2023.10441421](https://doi.org/10.1109/ICCIT60459.2023.10441421)

Low-Resource Machine Translation | *Transformer, S2S+Attention*

- Co-authored the research by implementing Transformer and Seq2Seq+LSTM model for Hajong ↔ Bangla MT.
- Submitted in LREC-COLING 2024

Image Classification | *Vision Transformer, S2S+Attention*

- Led the creation of the largest Bangladeshi fish image dataset for image classification using Vision Transformer.
- Accepted in ICEEICT 2024

Bengali Document Layout Analysis | *Detectron2*

- Detectron2 based Bengali Document Layout Analysis comparison on BaDLAD dataset.
- DOI: [DOI:10.48550/arXiv.2308.13769](https://doi.org/10.48550/arXiv.2308.13769)

FEATURED PROJECTS

StarGaze BD | *ML Algorithms (RF, SVM, LR), CNN, Flask, JavaScript, Streamlit*

[GitHub Link](#)

- Developed a web app using ML and DL to identify and provide details of famous Bangladeshi personalities from photos.
- Led the entire project development, excluding data collection, covering both statistical modeling and deep learning modules.

Freshman Utilities | *Java, Firebase, Google Directions API, Jsoup*

[GitHub Link](#)

- Developed an android app to facilitate information sharing and campus navigation for university freshmen.
- Implemented signup, verification, profile management, contact extraction, FAQ, map navigation, and media upload features.

CourseTrackr | *Java, Servlet, JSP, MySQL*

[GitHub Link](#)

- Developed a web based online course management system with user roles for admin, teacher, and student.
- Implemented student and course management sections, including admin, assign course, list view, and course registration.

QuesTek Pro | *Java, JavaFX, Text files*

[GitHub Link](#)

- Developed a desktop quiz application with verified admin capabilities and result export for in-person MCQ exams.
- Led the entire development, including registration, admin and student functions, quiz, and CSV result generation.

US8K-Audio-Clf | *RNN, MFCC*

[GitHub Link](#)

- Implemented a combination of RNN and MFCC for audio classification tasks on the UrbanSound8k dataset.

TECHNICAL SKILLS

Languages: Python, C/C++, Java, JavaScript, SQL (MySQL)

Frameworks: Tensorflow, Android (Java), React JS, Flask

Tools: Pandas, Scikit-Learn, Git, Firebase, VS Code, Kaggle, Google Colab, Linux, Azure Cloud

Soft Skills: Project Management

ACHIEVEMENTS

- Kaggle Notebook Expert (1x Expert). [Kaggle Profile](#)
- 6th in the DL Sprint 2.0 competition, as part of BUET CSE Fest 2023.
- Top 13% in the DataVerse Challenge, hosted by ITVerse in 2023.
- Top 28% in the Bengali.AI Speech Recognition competition.

EXTRA CURRICULARS

- Mentoring 2+ undergraduate team with their thesis on Bangladeshi Regional Audio Classification, and Ethnic Language Based Text-to-Speech Synthesis System
- Participated in ICT Ministry-sponsored training on UE4-based mobile game and app development
- Co-hosted DL Enigma 1.0 competition part of SUST CSE CARNIVAL 2024

REFERENCES

Dr. Mohammad Shahidur Rahman

Professor

Department of Computer Science and Engineering

Shahjalal University of Science and Technology, Sylhet, Bangladesh

Email: rahmanms@sust.edu

Relation: Thesis Supervisor and Mentor

Project Involvement: Currently Actively Involved in 2+ Research Projects Under his Guidance