

Sajib Kumar Saha Joy

Ahsanullah University of Science and Technology

✉ joyjft@gmail.com ☎ (+880)1740413252)

🌐 sajib-kumar.github.io

🏠 Hena Garden, House #44, Sher-E-Bangla Nagar, Dhaka 1207

Education

Ahsanullah University of Science and Technology

B. Sc. in Computer Science and Engineering

CGPA: 3.856 on a scale of 4.00 (2nd in Merit Position)

Dhaka, Bangladesh

Fall 2015 - Spring 2019

Rajshahi Government City College

Higher Secondary School Certificate (HSC)

GPA: 5.00 on a scale of 5.00

Rajshahi, Bangladesh

2011 - 2012

Shahzadpur Pilot High School

Secondary School Certificate (SSC)

GPA: 5.00 on a scale of 5.00

Rajshahi, Bangladesh

2009 - 2010

Research Interests

Natural Language Processing, Computer Vision, Machine Learning, Explainable AI

Undergraduate Thesis

Early Depression Detection From Social Network Using Deep Learning Techniques

Supervisor: Mr. Faisal Muhammad Shah, Associate Professor, Department of CSE, AUST

Publications

Published

- Kazi Toufique Elahi, Tasnuva Binte Rahman, Shakil Shahriar, Samir Sarker, **Sajib Kumar Saha Joy** and Faisal Muhammad Shah. "**Explainable Multimodal Sentiment Analysis on Bengali Memes**". In 26th International Conference on Computer and Information Technology (ICCIT), pages 1-6, 2023.
- **Sajib Kumar Saha Joy**, Farzad Ahmed, Al Hasib Mahamud and Nibir Chandra Mandal. "**An Empirical Study on How the Developers Discussed About Pandas Topics**". In *Machine Intelligence and Emerging Technologies*, pages 242–255, Cham, 2023. Springer Nature Switzerland.
- Farzad Ahmed, Samiha Sultana, Md Tanzim Reza, **Sajib Kumar Saha Joy** and Md. Golam Rabiul Alam. "**Interpretable Movie Review Analysis Using Machine Learning and Transformer Models Leveraging XAI**". In *2022 IEEE Asia-Pacific Conference on Computer Science and Data Engineering (CSDE)*, pages 1-6, 2022.
- **Sajib Kumar Saha Joy**, Dibyo Fabian Dofadar, Riyo Hayat Khan, Md. Sabbir Ahmed and Rafeed Rahman. "**A Comparative Study on COVID-19 Fake News Detection Using Different Transformer Based Models**". In *2022 IEEE Symposium on Industrial Electronics & Applications (ISIEA)*, pages 1-5, 2022.

- Faisal Muhammad Shah, **Sajib Kumar Saha Joy**, Farzad Ahmed, Tonmoy Hossain, Mayeesha Humaira, Amit Saha Ami, Shimul Paul, Md Abidur Rahman Khan Jim and Sifat Ahmed. "**A Comprehensive Survey of COVID-19 Detection Using Medical Images**". In *SN Computer Science*, 2(6): 1–22. 2021.
- Faisal M. Shah, Farzad Ahmed, **Sajib Kumar Saha Joy**, Sifat Ahmed, Samir Sadek, Rimon Shil and Md. Hasanul Kabir. "**Early Depression Detection from Social Network Using Deep Learning Techniques**". In *2020 IEEE Region 10 Symposium (TENSYP)*, pages 823–826, 2020.

Under Review

- Md. Tanvir Rouf Shawon, G. M. Shahariar, Farzad Ahmed and **Sajib Kumar Saha Joy**. "**Explainable Cost-Sensitive Deep Neural Networks for Brain Tumor Detection from Brain MRI Images considering Data Imbalance**". In *Multimedia Tools and Applications*, Springer, 2023

Ongoing Research Projects

- Gender Bias Mitigation for Bangla Classification Tasks
- Bengali Image Captioning
- Investigating the Effectiveness of XAI Generated Salient Features for Text Classification
- Phylogenetic Tree Construction Using BERT Based Model

Experience

Lecturer

Department of Computer Science & Engineering
Ahsanullah University of Science and Technology, Dhaka, Bangladesh

August 2021 - Present

Lecturer (Contractual)

Department of Computer Science & Engineering
BRAC University, Dhaka, Bangladesh

October 2020 - September 2021

Technical Skills

Languages: Python, C, C++, C#, JAVA, HTML5, PHP, XML, R JavaScript, 80x86 Assembly

Framework: CSS, WebGL, JSP

Database: MySQL

IDE: Jupyter Notebook, PyCharm, Eclipse, NetBeans, Microsoft Visual Studio Code

Operating System: Windows, Android

Deep Learning Tools: Keras, Tensorflow, Pytorch

Others: PL/SQL, LaTeX

Awards & Achievements

- Dean's List of Honor (Based on B.Sc. result)
- Certificate for paper presentation at 2022 IEEE Symposium on Industrial Electronics & Applications, Malaysia
- Certificate for paper presentation at the conference on Machine Intelligence and Emerging Technologies (MIET 2022)
- Certificate for completing the course "Natural Language Processing Specialization" in Coursera
- Certificate for completing the course "AI for Medicine Specialization" in Coursera

- Certificate for completing the course "TensorFlow" in Coursera
- Certificate for completing the course "Machine Learning" in Coursera
- Certificate for completing the course "Deep Learning Specialization" in Coursera

Academic Projects

1. Benchmarking Different Versions of BERT
Description: This project is all about analyzing the result obtained from different versions of Bert for classification task.
Link: <https://github.com/sajib-kumar/Benchmarking-different-version-of-bert->
2. Image Caption Genarator
Description: This project is all about generating caption of image. Flickr_8k dataset was used in this project.
Link: <https://github.com/sajib-kumar/Image-Caption-Genarator>
3. Online Examination System
Description: A online based exam system made with HTML, servlet, jsp, apache server.
Link: <https://github.com/sajib-kumar/Online-Written-Examination-System>
4. Expenditure Management System
Description: By using this android app, user can store their daily cost , shows Monthly cost.
Link: <https://github.com/sajib-kumar/DailyCost>
5. Graph Simulator
Description: Graph simulation application. User can create graph and can run BFS and DFS algorithm.
Link: <https://github.com/sajib-kumar/Graph-Simulator>
6. Paint
Description: User can draw basic shapes, free hand drawing, color object, save Image application.
Link: <https://github.com/sajib-kumar/Paint>

Extracurricular Activities

- Active member of AUST CSE Seminar Committee
- Advisor of Cefalo CodeFiesta 2022: AUST Inter-University Programming Contest
- Organizer of Intra-AUST Programming Contest Fall 2018
- Organizer of AUST CSE Festival Fall 2018

Reference

Dr. S. M. A. Al-Mamun

Professor, Department of Computer Science & Engineering
Ahsanullah University of Science and Technology
Email: almamun@aust.edu, al_mamun81@yahoo.com

Mr. Faisal Muhammad Shah

Associate Professor, Department of Computer Science & Engineering
Ahsanullah University of Science and Technology
Email: faisal.cse@aust.edu, faisal505@hotmail.com