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   **Dhaka, Bangladesh**
B. Sc. in Computer Science and Engineering   *Fall 2015 - Spring 2019*
CGPA: 3.856 on a scale of $4.00 (2^{nd}$ in Merit Position)

Rajshahi Goverment City College   **Rajshahi, Bangladesh**
Higher Secondary School Certificate (HSC)   *2011 - 2012*
GPA: 5.00 on a scale of 5.00

Shahzadpur Pilot High School   **Rajshahi, Bangladesh**
Secondary School Certificate (SSC)   *2009 - 2010*
GPA: 5.00 on a scale of 5.00

Research Interests

Machine Learning, Deep Learning, Natural Language Processing, Computer Vision

Undergraduate Thesis

Early Depression Detection From Social Network Using Deep Learning Techniques
Supervisor: Mr. Faisal Muhammad Shah, Associate Professor, Department of CSE, AUST

Publications

○ **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 (TENSYMP), pages 823–826, 2020.*

Ongoing Research Projects

○ Visualizing the Effectiveness of Cost Sensitive Neural Network for Imbalanced Dataset Using XAI
○ Investigating the Effectiveness of XAI Generated Salient Features for Text Classification
○ Phylogenetic Tree Construction Using BERT Based Model
○ Image Captioning

Experience

Lecturer
Department of Computer Science & Engineering   *August 2021 - Present*
Ahsanullah University of Science and Technology, Dhaka, Bangladesh

Lecturer (Contractual)
Department of Computer Science & Engineering   *October 2020 - September 2021*
BRAC University, Dhaka, Bangladesh

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, 16-17 July 2022, Malaysia
○ Certificate for paper presentation at the conference on Machine Intelligence and Emerging Technologies (MIET 2022), Noakhali Science and Technology University (NSTU), Bangladesh
○ 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
○ Certificate for completing the course "Python for Data Science and Machine Learning Bootcamp" in Udemy

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. Loan Pay Back Prediction System
   Description: Predict whether a person going to pay the loan back or not.
   Link: `https://github.com/sajib-kumar/Data-Science-Machine-Learning/tree/master/Loan%20Pay%20Back%20Predictor`
3. 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`
4. Online Examination System
   Description: A online based exam system made with HTML, servelet, jsp, apache server.
   Link: `https://github.com/sajib-kumar/Online-Written-Examination-System`
5. 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`
6. 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`
7. Paint
   Description: User can draw basic shapes, free hand drawing, color object, save Image application.
   Link: `https://github.com/sajib-kumar/Paint`

Extracurricular Activities

o Advisor of Cefalo CodeFiesta 2022: AUST Inter University Programming Contest
o Organizer of Intra-AUST Programming Contest Fall 2018
o Organizer of AUST CSE Festival Fall 2018

Reference

Dr. Md. Shahriar Mahbub
Head, Department of CSE
Ahsanullah University of Science and Technology
Email: shahriar.cse@aust.edu

Dr. S. M. A. Al-Mamun
Professor, Department of Computing Science and 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