Salman Farsi

EDUCATION

Chittagong University of Engineering and Technology,

B.Sc. in Computer Science and Engineering CGPA: 3.80 / 4.00 (Position: 8th, Top 6%)

Feb 2019 – Aug 2024 Chattogram, Bangladesh

EXPERIENCE

Software Engineer, Samsung R&D Institute Bangladesh

Jan 2025 - Present

- Working on the development and integration of Al-based features in the **Samsung Internet Browser App**, a widely used browser application with over 128 million users.
- Contributed to the implementation and integration of an award wining AI Proof of Concept (PoC), "Contextual Auto Tab Grouping", that categorizes the opened tabs into related groups within just one single click.
- Implemented the v29.0.0 tab manager's new UI that increased Monthly Active Users (MAU) to 10 millions, also resolved lots of bugs that increased the view refresh rate by nearly 20%.

Adjunct Lecturer, Premier University | Chattogram, BD @

Nov 2024 – Jun 2025

- Received specialized training in Outcome-Based Education (OBE)
- Designed OBE-aligned curriculam for the courses teaching currently.
- Neural Networks and Fuzzy Logic @[OBE Course Plan] @ & NNFL Lab @[OBE Course Plan] @
- Computer Graphics & Image Processing @[OBE Course Plan] & & CGIP Lab @[OBE Course Plan] &
- Mobile Application Development Lab | @[OBE Course Plan] @

Undergraduate Research Member, CUET NLP Lab | Chattogram, BD

Nov 2023 – Mar 2024

• Participated in several shared tasks, became champions in three and published four system description papers.

Software Engineer Trainee, Red Dot Digital Limited | Dhaka, BD ∂

Sep 2023 – Oct 2023

• Developed a CRUD API using JAVA, learned to maintain SDLC & introduced with agile frameworks like scrum.

RESEARCH INTEREST

🧠 Information Extraction & Low-Resource NLP 🎥 Multimodality 🔆 LLM and Generative Al

🧩 Explainable AI (XAI) 🌍 Applied Computer Vision and Bioinformatics 📱 HCI and Software Engineering

PUBLICATIONS

EcomFraudEX: An Explainable Machine Learning Framework for Victim-Centric and Dual-Sided Fraud Incident Classification for

20 Jan 2025

E-Commerce Market, European Alliance for Innovation (EAI) &

- Salman Farsi & Mahfuzulhoq Chowdhury, EAI Endorsed Transaction on Scalable Information System, vol. 12, Jan. 2025 (Indexed By: Scopus, IF: 1.98, Quartile: Q2)
- Proposes an explainable machine learning framework, **EcomFraudEX**, that classifies dual-sided (customer and seller) e-commerce fraud incidents using ensemble models and interpretable reasoning techniques.

E-Vigilant: An AI-Powered E-commerce Assistant Smartphone Application with Customer and Seller Fraud Detection, Seller Identity Check, Legal Help, E-Shopping Features, IEEE &

25 Mar 2025

- Salman Farsi & Mahfuzulhoq Chowdhury, 2024 Second International Conference on Advanced Computing & Communication Technologies (ICACCTech), Sonipat, India, 2024, pp. 412-417.
- Introduces a multifunctional e-commerce assistant mobile application that supports fraud prediction, identity verification, legal help, and complaint management for both customers and sellers.

Fake News Detection in Malayalam Language Leveraging Fine-Tuned MuRIL BERT, $EACL \ \varnothing$

22 Mar 2024

- Salman Farsi, Asrarul Hoque Eusha, Ariful Islam, Hasan Mesbaul Ali Taher, & Mohammed Moshiul Hoque, In Proceedings of the Fourth Workshop on Speech, Vision, and Language Technologies for Dravidian Languages (DravidianLangTech-2024) pages 173–179, St. Julian's, Malta.
- Proposed a fine-tuned MuRIL model that efficiently performs news classification and addresses class imbalance.

Hate and Offensive Language Detection in Telugu Code-Mixed Text Using Sentence Similarity BERT, $\textit{EACL}~\mathscr{D}$

22 Mar 2024

• Salman Farsi, Asrarul Eusha, Jawad Hossain, Shawly Ahsan, Avishek Das, and Mohammed Moshiul Hoque, In Proceedings of the Fourth Workshop on Speech, Vision, and Language Technologies for Dravidian Languages (DravidianLangTech-2024), pages 193–199, St. Julian's, Malta

• Presents a fine-tuned Indic-SBERT transformer model for offensive language detection in social media, achieving a macro F1-score of 0.7013 and ranking 6th in a shared task competition.

Hate Speech Event Detection, Target Identification and Stance Classification for Climate Activism Using Transformer-based

22 Mar 2024

Models, Association for Computational Linguistics @

- Salman Farsi, Asrarul Hoque Eusha, and Mohammad Shamsul Arefin, In Proceedings of the 7th Workshop on Challenges and Applications of Automated Extraction of Socio-political Events from Text (CASE 2024), pages 145–155, St. Julians, Malta.
- Implements fine-tuned transformer models, including m-BERT and Climate-BERT, achieving 1st, 6th, and 15th place rankings across three sub-tasks.

Sentiment Analysis using Transformer-Based Models in Code-Mixed and Transliterated Tamil and Tulu, EACL ⊘

22 Mar 2024

- Asrarul Eusha, Salman Farsi, Ariful Islam, Jawad Hossain, Shawly Ahsan, and Mohammed Moshiul Hoque, In Proceedings of the Fourth Workshop on Speech, Vision, and Language Technologies for Dravidian Languages, pages 205–211, St. Julian's, Malta.
- Develops sentiment analysis models for code-mixed and transliterated Tamil and Tulu using ML, DL, and transformer approaches, achieving 3rd and 1st place rankings in the respective shared task.
- Multi-Scale Deep Feature Fusion with Bagging-Based Ensemble

Framework for Remote Sensing Scene Classification

- *Ongoing Research (Deep Learnig | Satellite Image Classification | Image Processing | Geoscience)
- A Zero-Shot Learning based topic modelling for Unsupervised Customer Review Classification leveraging External Knowledge
 - *Ongoing Research (LLM | Zero-Shot Learning | Text Classification | Prompt Engineering)

PROJECTS

Contexual Auto Tab Grouping @ | Samsung Research | 1st place in Al PoC Exhibition Contest

- Implemented an automatic tab grouping feature based on the contextual content of each tab. Utilized the DistilBERT model to reduce computational complexity while maintaining accuracy.
- Tabs were categorized into 20 distinct groups, including Sports, Entertainment, Education, and more.

Task-Scheduling Using Reinforcement Learning and DQN ∅ | Reinforcement Learning, Deep Queue Learning

- Implemented an RL-based approach to optimize task allocation and resource management.
- · Contributed to improving resource utilization and overall system efficiency through dynamic scheduling technique

Multiple Disease Prediction System Using Machine Learning ∅ | Python, Tensorflow, FastAPI, Streamlit

- Trained ML models for predicting a person's possibility of having heart, parkinson, and diabetes disease.
- Feature-engineered the dataset which achieved 98% accuracy, and deployed the model.

PROGRAMMING PROFILE AND ACHIEVEMENTS

- I have solved 2000+ problems on various online judges and participated in many onsite and online contests
- Codeforces: Specialist (Max Rating 1527) Ø | Codechef: 4 star(Max Rating 1737) Ø | StopStalk Handle Ø
- 3857th (Top 11%) at Meta Hacker Cup Qualification Round 2021 @
- Honorable Mention-ICPC Asia-Dhaka Regional Preliminary Contest 2023 &
- Programmer of the Semester Awarded by CUET Computer Club @
- HackerRank Problem Solving Certificate (Intermediate) 🔗 & Problem Solving Certificate (Basic) 🔗
- 8th (CUET_Data_Kom) UITS Ahmed Zobayer Inter-University Programming Contest 2023
- 5th (CUET_Data_Kom) CUET CSE FEST Programming Contest 2023 &
- 6th (CUET_Lazarus) RMSTU Bangabandhu Programming Contest 2021 🔗
- 15th (CUET_Lazarus) 15th IIUC Programming Contest 2023 ₽
- 18th (CUET_Lazarus) CUET Tech Carnival 1.0 IUPC 2021 @

SKILLS

- Programming Language: C, C++, Java, Python | Libraries: TensorFlow, Keras, NLTK, Scikit-learn, Gensim, & Pandas
- Database: Firebase & MySQL | Frameworks & Tools: Flutter, Beautiful Soup, Git, & Latex
- Language Proficiency: Bangla (Native Language) | English (Fluent Working Experience)

LEADERSHIP & EXTRA-CURRICULAR INVOLVEMENT

Virtual Volunteer, 18th European Chapter of the Association for Computational Linguistics (EACL)

• Responsible for content verification and virtual conference management in this prestigious NLP conference.

Vice President, Greater Noakhali Student Forum CUET (July 2023-July 2024)

• Engaged in regional student welfare activities, organized admission events, annual forum tour, etc.

Assistant Programming Secretary, CUET Computer Club (June 2022 - May 2024)

• Conducted algorithm and data structure sessions for fellow junior coders and organized several contests.