Md. Tauhidur Rahman Sakib



Machine Learning Engineer | Data Analyst | AI Researcher

Dhaka, Bangladesh | Open to Remote | +880 1776-606340

tauhidurrahmansakib@gmail.com

LinkedIn | GitHub | Google Scholar | WhatsApp

PROFESSIONAL SUMMARY

Industry-focused Machine Learning Engineer and AI developer with a B.Sc. in Computer Science and Engineering, multiple ML and deep learning publications, and hands-on experience delivering end-to-end technical projects. Skilled in model development, data analysis, NLP chatbot deployment, experimentation, and automation. Adaptable across AI, software, and data teams, combining research-backed problem-solving, technical leadership, fast learning, and strong execution to build practical solutions.

TECHNICAL SKILLS

Programming and Data: Python, JavaScript, HTML/CSS, data preprocessing, feature engineering, exploratory data analysis, data visualization
Machine Learning: Random Forest, Gradient Boosting, XGBoost, stacking, SVM, autoencoders, SMOTE, K-fold cross-validation, F1, ROC-AUC, advanced hybrid model design (parameter-efficient, high-performance)
Deep Learning and NLP: CNN, Vision Transformers (ViT), BERT, DistilBERT, transfer learning, TF-IDF, chatbot development, computer vision, image segmentation, Grad-CAM
Statistics and Research: SPSS, SmartPLS, ANOVA, t-tests, hypothesis testing, survey design, technical writing, research leadership
Tools: Jupyter Notebook, Git, GitHub, CI/CD, Docker, LaTeX, SPSS, SmartPLS

PROFESSIONAL EXPERIENCE

Research Assistant, Machine Learning | *Present*
Chang'an University, School of Information Engineering | *Remote*

- Collaborate with Prof. Zhaoyang Zhang on transformer model-editing research using the COAR (Component Modeling and Editing via Random Ablations) framework; manuscript under review at a Q1 journal.
- Analyzed 1,224 DistilBERT components across two corpora. Contrastive COAR ranking achieved selectivity ratios of 2.36–27.15 versus 0.81–1.24 for marginal ranking, with a held-out accuracy change of at most 0.0006.

AI Developer
Devartistry

- Designed and deployed NLP-based chatbot assistants for client websites to automate customer support and improve user interaction.
- Optimized chatbot performance and integrated conversational AI into web applications.

Research Supervisor and First Author, Machine Learning
Independent Research Projects

- Supervised and contributed substantially to most stages of multiple ML/DL papers, from study design and data preparation through modeling, experimentation, validation, and manuscript writing.
- Served as first author on selected papers, including missile failure prediction, while coordinating collaborators and project execution.

RESEARCH AND PUBLICATIONS

Research publications include lumbar spinal stenosis MRI classification (97.4% cross-validation accuracy; 92.9% external accuracy), diabetic retinopathy classification (96.33% accuracy), retinal disease detection, Alzheimer's prediction, lightweight polyp segmentation (0.83 mean Dice on unseen data), drug mechanism prediction (91.82% accuracy), missile failure prediction, NLP spam detection (nearly 99% accuracy), and mental health and statistical studies using SPSS and SmartPLS. Full publication list: Google Scholar profile.

EDUCATION

Bachelor of Science in Computer Science and Engineering | *2020–2025*
BRAC University | *Dhaka, Bangladesh*