

Sakil Sarker

Graduate Research Assistant

✉ sakilsarkerewu@gmail.com

☎ +1 705 9884975

📍 Oshawa, Ontario

📁 Portfolio

📄 LeetCode

Education

Ontario Tech University, Oshawa, ON, Canada

Sept 2024 – Present

Master of Science in Computer Science (Specializing in Artificial Intelligence)

Research Focus: **Large Language Models (LLMs)** and **Human-AI Interaction**.

CGPA: 4.3/4.3

East West University, Dhaka, Bangladesh *B.Sc. in Computer Science and Engineering*

Apr. 2017 – Jun.

2021

Skills

Programming Languages: Python (proficient), C, C++, JavaScript, ABAP

AI/LLM Expertise: Extensive experience with Large Language Models (LLMs) using Hugging Face, OpenAI APIs, and fine-tuning transformer-based models (e.g., GPT, BERT)

ML/AI Frameworks: PyTorch, TensorFlow, Keras, scikit-learn

HCI Tools & Techniques: Usability Testing, User-Centered Design, AI-driven Interaction Design

Web Development: React.js, HTML, CSS, Bootstrap

Libraries/Data Tools: Pandas, NumPy, Matplotlib, Seaborn, Plotly

General Tools: MS Office, GitHub, MySQL, Tableau, LaTeX

Professional Experience

Ontario Tech University, Oshawa, Canada **Graduate Research Assistant and Teaching Assistant**

Sep. 2024 – Present

- Conducted research on Human-AI Interaction and Large Language Models (LLMs), contributing to advancements in explainability and user-centered AI systems.
- Supported undergraduate courses through labs and tutorials, including:
 - **Artificial Intelligence - 72751 (Winter 2025):** Conducted tutorials to support students in understanding AI concepts, applications, and techniques.
 - **Big Data Analytics - 73821 (Winter 2025):** Delivered lab sessions and lectures focusing on practical learning for big data frameworks and tools.
 - **Systems Programming - 74722 (Winter 2025):** Assisted students with advanced programming concepts and systems-level programming tasks.
 - **Data Mining - 45574 (Fall 2024):** Provided technical support, guided lab sessions, and assisted students in understanding data mining algorithms and techniques.

BJIT Group, Dhaka, Bangladesh **Software Engineer**

Oct. 2021 – Aug. 2024

- Designed and developed SAP applications using ABAP and FIORI, enhancing enterprise resource management systems.
- Worked on diverse projects, including data analytics, machine learning models, and full-stack web development, tailored to meet client requirements.
- Built predictive models to extract actionable insights and improve decision-making processes for business operations.
- Developed user-friendly full-stack web applications, integrating front-end and back-end technologies for seamless functionality.
- Collaborated with cross-functional teams in an Agile environment, ensuring successful project delivery and client satisfaction.

- Adapted quickly to varying project needs, contributing to innovative solutions across multiple domains.

Carnegie Mellon University (Remote), Pittsburgh, USA Deep Learning Research Intern May 2021 – Oct. 2021

- Worked on protein structure prediction using machine translation techniques.
- Ran experiments to improve deep learning model performance.

Notable Projects

Advanced Email Spam/Ham Detection System Using Transformer-Based Model

Developed a transformer-based model leveraging transfer learning to classify emails as spam or not. Integrated into a user-friendly web application with real-time predictions and confidence scores.

AI-Powered Recruitment Advisor

Streamlined recruitment workflows using Large Language Models (LLMs) for tasks like resume screening, interview question generation, and ensuring diversity in hiring practices.

Brain Tumor Detection Using Deep Learning

Designed and implemented a convolutional neural network (CNN) model to detect brain tumors from MRI scans. Achieved high precision and recall, contributing to early diagnosis and medical decision-making.

E-commerce Website

Developed a scalable full-stack e-commerce platform using Django. Features include a secure payment gateway, inventory management, and a responsive interface optimized for an enhanced user experience.

Research Publications

- **Focusing on the Unfocused: Understanding Online Interactions with Small-Scale Non-Profits**

Journal: ACM Journal on Computing and Sustainable Societies, 2023

Authors: Rudaiba Adnin, Ishita Haque, Sadia Afroz, Alvi Md Ishmam, **Sakil Sarker**, Md Kafi Khan, Afsana Mimi, Sriram Chellappan, ABM Alim Al Islam.

- **K-Cosine-Means Clustering Algorithm**

Conference: International Conference on Electronics, Communications, and Information Technology, 2021

Authors: Md Kafi Khan, **Sakil Sarker**, Syed Mahmud Ahmed, Mozammel HA Khan.

- **K-Cosine-Medoids Clustering Algorithm**

Conference: 5th International Conference on Electrical Information and Communication Technology, 2021

Authors: Md Kafi Khan, Syed Mahmud Ahmed, **Sakil Sarker**, Mozammel HA Khan.

Certifications

SAP Certified Development Associate - ABAP with SAP NetWeaver 7.50

AWS Certified Cloud Practitioner

Python Programming: A Concise Introduction (Coursera)

Scrum Team Member Accredited Certification

TCPS-2 CORE Certification

Honors and Awards

Dean's Scholarship, East West University

2019 – 2020

Medhalalon Fund Scholarship, East West University

2020 – 2021

Ranked 2nd in SAP ABAP and Fiori Training, BJIT Group

Oct. 2021 – Dec. 2021