AMINUL ISLAM

Email : mislam34@uic.edu
LinkedIn, GitHub

RESEARCH INTERESTS

My research interests lie at the intersection of data science, causal inference, machine learning, and econometrics. More specifically, the goal of my research is to address various biases in recommender systems (e.g., learning-to-rank, collaborative filtering, generative AI) to facilitate unbiased and fair recommendations. Currently, I am working on applying causal inference and econometric methods to mitigate biases in learning-to-rank and graph-based collaborative filtering methods.

EDUCATION

PhD Student in CS, University of Illinois Chicago Jan. 2023 to present
CGPA : 4.0/4.0
Advisor: Dr. Elena Zheleva

B.Sc. in Computer Science & Engineering Jul. 2014 to Oct. 2018
Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh
CGPA : 3.57/4.0

WORK EXPERIENCE

Graduate Research Assistant, University of Illinois Chicago May 2024 to present

- I am currently working under the supervision of Dr. Elena Zheleva. I have worked on two projects using econometric methods to correct for biases in learning-to-rank systems. I am also working on addressing biases in graph-based recommender systems.

Graduate Teaching Assistant, University of Illinois Chicago Jan. 2023 to May 2024

- I worked as a teaching assistant for *Programming Practicum* and *Introduction to Data Science* courses.

Software Engineer, Ridmik Labs, Dhaka, Bangladesh Nov. 2018 to Dec. 2022

- I was a Software Engineer at Ridmik Labs, where I was one of the main developers of the Bengali Ridmik Keyboard, which has over 200 million users. I also had experience building large-scale native Android and iOS apps (e.g., Boitoi-Android, Boitoi-iOS) which have millions of users. I had expertise in developing a Bengali news article summarizer, web applications, backend systems, REST APIs, Web2 end-to-end encryption, account kit, and ensuring data privacy and security in software applications.

AIST Web Application, Department of CS, BUET May 1, 2021 to July 31, 2021

AIST Project is a web application for users to visualize the predictions of AIST (An Interpretable Attention-based Deep Learning Model for Crime Prediction).

SKILLS

Programming Languages : Python, Java, Kotlin, Swift, C, C++, Assembly(80X86)
Scripting Languages : JavaScript, HTML, CSS, MATLAB, Shell Scripts
Mobile Application Development & Frameworks : Android, iOS, Django
Database : SQL, Oracle
Security : AES (CBC & ECB), CommpnCrypto API, iOS Keychain
Tools & Others : Pandas, Tensorflow, PyTorch, NLTK, REST API, Beautiful Soup, Seaborn, Google ML Kit & Vision API, Google Map API, Firebase, JNI, LaTeX

REVIEWER

WWW'25 and SDM'25