Postgraduate Seminar Series

Venue: Graduate Seminar Room
Date & Time: December 07, 2024 at 2:15 PM

Speaker Information

Rifat Rahman (Std No. 0419052028) is a part time M.Sc. student in the department of CSE, BUET. He completed his B.Sc. (Engg) in CSE from BUET in 2019. He is currently serving as a lecturer at Institute of Appropriate Technology (IAT) in BUET. His research interests lie at the intersection of Human Computer Interaction, Computational Social Science, Privacy & Security, and Natural Language Processing. He is now doing his postgraduate thesis under the supervision of Dr. Mohammed Eunus Ali. He will be speaking about his ongoing research in this talk.

Exploring Mental Health Disorders of Bangladeshi University Students from Self-reported Survey Data and Social Media Data Analysis

Mental health refers to psychological, emotional, and social well-being that affects our thought patterns, feelings, and behavior. Any mental health disorders may disrupt people's regular lives. University-going students face more challenges in expressing mental health issues in open discussions due to stigma and privacy risks. However, they reveal mental health-relevant signals on social media platforms. In most cases, researchers or psychiatrists try to figure out the mental health disorders of students using longitudinal studies from their self-reported data that may be error-prone, biased, and cost & time-consuming. In this study, we analyze both self-reported survey data and social media data to understand the underlying factors and reasons behind mental health disorders (i.e., anxiety, stress, depression, and suicidal ideation or suicidality) of students. It will also highlight how social media data analysis can be more robust in identifying novel and informative insights related to mental health disorders. We aim to identify associated factors with mental health disorders of Bangladeshi university students from their self-reported data and develop classification & regression models for predicting mental health disorder levels and scores, respectively, utilizing the associated factors. Then, we propose a novel topic modeling mechanism in Bangla for analyzing social media data and finally explore social media data to gather informative knowledge regarding mental health disorders. In most cases, the insights from the social media data complement the findings from the self-reported survey data. However, social media data analysis unveils new insights that are more informative than survey data analysis. Moreover, the social media data analysis justifies the ups and downs in the mental health disorder scores due to different events (i.e., political unrest, protests or movements, disasters, pandemics, etc.) over time.