Monoshiz Mahbub Khan

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EDUCATION

Rochester Institute of Technology

August 2021 - Present

PhD in Computing and Information Sciences Current CGPA: 3.93 (out of 4.00)

University of Dhaka

January 2016 - January 2020

BSc in Computer Science and Engineering
Department of Computer Science and Engineering

CGPA: 3.55 (out of 4.00)

RESEARCH EXPERIENCE

Bangla Abstractive Text Summarization using Encoder-Decoder Model

2019-2020

A research project on constructing a dataset for the task of abstractive text summarization in Bangla, and constructing a deep learning based model capable of using said dataset. The model was written in Python using Tensorflow modules. The research was conducted as the final year research project at University of Dhaka under the supervison of Dr. Muhammad Asif Hossain Khan.

https://github.com/monoshizmkhan/Bangla-Abstractive-Text-Summarization

Code Search 2021-2024

Research project focusing on retrieving programming language artifacts related to some natural language queries from a pool of possible programming language artifacts, using dual encoder models. Model is built in Python using TensorFlow modules. The research is being conducted under the guidance of Dr. Zhe Yu.

https://anonymous.4open.science/r/CodeSearch-6AC7/README.md

Preference Learning

2023-Present

Research project focusing on modelling comparative judgements using large language model based architectures. The model is built using PyTorch modules. The research is being conducted under the guidance of Dr. Zhe Yu.

https://github.com/monoshizmkhan/comparabilityTask

Graduate Research Assistant

Fall 2021 - Fall 2023, Fall 2024 - Present

Have been working as a graduate research assistant in the Lab of Human-In-the-Loop Software Engineering at Rochester Institute of Technology under the guidance of Dr. Zhe Yu, conducting research primarily on the code search and preference learning tasks.

Graduate Teaching Assistant

Spring 2023

Worked as a graduate teaching assistant for the course IDAI-720: Research Methods for Artificial Intelligence at Rochester Institute of Technology. Responsibilities included grading and hosting office hours. Course was taught by Dr. Zhe Yu and Dr. Esa Rantanen.

Intern June 2024 - August 2024

Worked as an intern at ABB AG at the Mannheim, Germany office. Work during the internship focused on a Named Entity Recognition project using various methods, including language models, large language models, deep learning models and more. The project was conducted under the supervision of Nika Strem. The internship was obtained through the DAAD Rise Professional Program 2024.

PROJECTS

Kabaddi 2016

A single or multiplayer video game based on the sport of the same name. Written in C++ as the Fundamentals of Programming Lab project at University of Dhaka.

https://github.com/monoshizmkhan/Kabaddi

Trapped 2017

A single or online multiplayer interactive puzzle game. Written in JAVA as the Object Oriented Programming Lab project at University of Dhaka.

https://github.com/monoshizmkhan/Trapped

Musyc 2018

A music-based social networking application with a built-in offline music player on Android platform. Made using JAVA and SQLite as the Application Development Lab project at University of Dhaka. https://github.com/monoshizmkhan/Musyc

EasyML 2018

A web-based application for the purpose of applying and visualizing several machine learning algorithms on datasets. Written using Python and JavaScript Served as the project in the course Software Engineering Lab at University of Dhaka.

https://github.com/Saad-Mahmud/EasyML

Pharmassistant 2018

A software as a user interface for the use of online product inventory, searching, sales and finances management by employees of a pharmacy. Written in Python and JavaScript as the Software Design Patterns Lab project at University of Dhaka.

https://github.com/HHMoon13/Pharmassist

CSEDU Project Hub

2019

A web application for the purpose of storing, sharing and viewing undergrad research projects. Written in Python and JavaScript as the Internet Programming Lab project at University of Dhaka.

https://github.com/monoshizmkhan/CSEDU-Project-Hub

BackPack 2022

An e-store for selling hiking, camping and miscellaneous equipment and equipment collections (known on the store as backpacks). Written using Java Spring and Angular frameworks as the Foundations of Software Engineering course project at Rochester Institute of Technology.

TECHNICAL STRENGTHS

Programming languages C, C++, JAVA, Python, JavaScript, R, MATLAB, SQL

Frameworks Flask, Spring, Angular

Software & Tools LaTeX, Tableau, Version control system (Git), Microsoft Office,

Blender 3D Computer Graphics Software, Adobe Photoshop

SCHOLARSHIPS

• DAAD Rise Professional Program 2024

EXTRA-CURRICULAR ACTIVITIES

- Runner-up in secondary school math olympiad, Udayan Higher Secondary School and College,
- Member of Udayan College Science Club, 2013-2015

LANGUAGE PROFICIENCY

Bangla Fluent English Fluent German Beginner

Signature