Tauhid Tanjim

Computer and Information Science Department Cornell Tech, Cornell University 2 W Loop Rd, New York, NY 10044 tanjim13.github.io/tauhidtanjim

Email: tt485@cornell.edu

Research Interest Artificial Intelligence, Health Tech, Human-Robot Interaction, Computer Vision

Academic Appointments Ph.D., Information Science Cornell Tech, New York, NY,

Research Advisor: Dr. Angelique Taylor

Fall 2022 - Present

CGPA: 3.84/4.00

B.Sc. in Computer Science and Engineering (CSE)

University of Dhaka, Dhaka (2019)

Research Advisor: Dr. Md Mosaddek Khan

Publications

Zaoad, S. A., **Tanjim, T.**, Hasan, M., Mamun-Or-Rashid, M., Almansour, I. A., & Khan, M. M. (2021, September). Accelerating Message Passing Operation of GDL-Based Constraint Optimization Algorithms Using Multiprocessing. In 2021 IEEE Intl Conf on Parallel & Distributed Processing with Applications, Big Data & Cloud Computing, Sustainable Computing & Communications, Social Computing & Networking (ISPA/BDCloud/SocialCom/SustainCom) (pp. 706-714). IEEE.

Hossain, E., Karim, M. R., Hasan, M., Zaoad, S. A., **Tanjim, T.**, & Khan, M. M. (2022). SPaFE: A Crowdsourcing and Multimodal Recommender System to Ensure Travel Safety in a City. IEEE Access, 10, 71221-71232.

Awards and Grants

Cornell Tech Outstanding TA Award

Champion under the category of "mobile app", DU ICT Fest

Runner Up, BRACathon

Grant Awarded for Government Based Project, ICT Ministry

2020

Computer Skills

Languages: C, C++, Java, Python Bash, L⁴TEX. **Web Development**: HTML, CSS, JavaScript.

Applications: Vi/Vim, Eclipse, Visual Studio, Git, VMWare, VirtualBox. Operating Systems: Unix, Linux, Mac OSX, Windows, Android. Frameworks: PyTorch, Tensorflow, Keras, Scikit-learn, ROS.

Professional and

Cornell Tech, Cornell University

Teaching Experience

Teaching Assistant

Introduction to Human-Robot Interaction Practical Application in Machine Learning

Machine Learning Engineering

Fall 2022 Spring 2023 Fall 2023

Brac University

Part-Time Lecturer

Data Structures & Algorithms
Data Communications
Operating Systems
Summer 2021, Summer 2021, Fall 2021
Simulation and Modeling
Spring 2021, Summer 2021, Fall 2021
Spring 2021, Summer 2021
Spring 2021, Summer 2021
Summer 2021
Summer 2021, Fall 2021

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University of Dhaka

Research Assistant

Government-funded Project by ICT Ministry Bangladesh

2020-2021

Academic Services

Reviewer

ACM/IEEE Conference on Human-Robot Interaction (HRI) 2024 IEEE International Conference on Robotics and Automation (ICRA) 2024

Projects

LalBus - An android-based application that helps Dhaka University students to track their buses. Additionally, this app provides route information and bus schedules to the students.

YouTube Link, Download Link

cricHUB - A web-based application to collect data from other news-based websites and publish it. In this web application, you can post news as well. Project Link

iGestRecognito - This stands for 'Intelligent Gesture Recognition'. An android application to create a communication media in sign language using Text to Sign conversion and vice-versa. It includes an American Sign Language Keyboard and a media player with American Sign Language (ASL) subtitle feature. It also incorporates an alphabetical gesture pattern recognition feature.

YouTube Link

uRECO - A web application related to image processing and gesture recognition. It detects American Sign Language (ASL) characters using the computer camera, facial expression classifier & virtual PC keyboard YouTube Link

COLORBALL - A game created with c++, using SFML. It collects stars to increase scores. The ball changes color and can pass if the ball and the obstacle have the same color. Once the gamer reaches higher levels, some bombs and death gems come as obstacles, and the ball moves faster than before.

PC Dictator - This is a remote PC control system built by using java, java networking, java swing, robot class. The server can control many clients' various actions simultaneously. The system sleep, shutdown, lock, send files, receive files, send messages, install software on its own. The Mouse and keyboard device of the Client's PC can be controlled from Server using robot class. YouTube Link

Smart-Home - It is an Arduino based project. if any accident strikes in the user's house, it will send an SMS notification on the user's mobile and help to solve the problem simultaneously.

Extracurricular Activities

Animal Welfare Club of Dhaka University

Co-Founder 2020-2022

My organization is responsible for securing the wildlife of the campus area.

Hashimukh

Educator 2014-2016

This is an NGO, which ensure rights of street children and provides them free access to primary education.

References

Dr. Angelique Taylor

 $Assistant\ Professor$

Information Science Department,

Cornell Tech, Cornell University, NY, USA

Email: amt298@cornell.edu

Dr. Md Mosaddek Khan

 $Associate\ Professor$

Department of Computer Science and Engineering,

University of Dhaka, Bangladesh

Email: mosaddek@du.ac.bd