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| **Tauseef Ibne Mamun**  [tmamun@mtu.edu](mailto:tmamun@mtu.edu)  +1 (857)-574-9931  https://tmamun.netlify.app | 407 Shelden Avenue, Apt 9, Houghton, Michigan, 49931 |

# SUMMARY

*Doctoral Candidate* with specialized training in both *human-computer interaction* and *behavioral psychology*. Have a *strong programming*background. Experience in human factors analysis (*qualitative* and *quantitative*) and executing *usability* studies mainly in software and rail warning systems.

# Research Tools/Methods

* Usability Evaluation (in-vehicular warning system, explainable AI system).
* In-field semi-structured user/driver interview.
* The collection of driving behavior data involves utilizing a Driving Simulator and a portable Eye-Tracker.
* Data interpretation using advanced statistical modeling.

# EDUCATION

Michigan Technological University | Houghton, MI

**Ph.D. Applied Cognitive Science and Human Factors** Fall 2023

Michigan Technological University | Houghton, MI

**Artificial Intelligence in Healthcare Certificate** 2021

Michigan Technological University | Houghton, MI

**MS Applied Cognitive Science and Human Factors** 2019 – 2021

Ahsanullah University of Science & Technology | Dhaka, Bangladesh

**BS Computer Science & Engineering** 2011 – 2015

# EXPERIENCES

Michigan Technological University, Cognitive and Learning Sciences | Houghton, MI

**Research Assistant** 2019 – Present

## Tasks:

* Social media data analysis (**qualitative** data) and **human behavior analysis** in autonomous driving while giving user-centric explanations from social media for **human-AI collaboration**.
* Designing **novel explanation methods** (explainable AI - XAI) for the **human-AI team**.
* Developing **computational models** for naturalistic scenarios, e.g., pandemic human travel patterns.
* **Behavioral analysis** of drivers in rail crossings through **statistical models; Semi-structured** **interviews** inhealthcare, rail safety, and XAI domains; also determining the **usability** of new systems in rail crossings.
* Working/Worked with **Defense Advanced Research Projects Agency** and **Federal Railroad Administration** on different research projects.

Mighty Egg Technologies | Canada/Bangladesh

**Programmer Analyst** 2015 – 2018

## Tasks:

* Database Design & API development.
* Web and Mobile App Development.
* Software deployment in Amazon Web Service, Digital Ocean, Heroku.

**Programming Expertise**

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| --- | --- |
| R, Python, C, C++, Java, PHP, Ruby, PEBL  *Git*: [GitHub](https://github.com/tm012) (https://github.com/tm012) |  |

# FEATURED LEADERSHIP ROLES

* Vice President at Ahsanullah University of Science & Technology’s Computer Science & Engineering Society 2014 – 2015
* Vice President at Bangladeshi Student Association at Michigan Technological University 2020 – 2021

**INTERESTS**

[Photography](https://www.flickr.com/photos/63464150%40N02/) | App Development | Video and Photo Editing