

# Tauseef Ibne Mamun

[tmamun@mtu.edu](mailto:tmamun@mtu.edu)  
+1 (857)-574-9931  
<https://tm-cv-p.herokuapp.com>

407 Shelden Avenue, Apt 9,  
Houghton, Michigan, 49931

## SUMMARY

Ph.D. student 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.
- Autonomous driving behavior analysis in the driving simulator.
- Data interpretation using advanced statistical modeling.

## EDUCATION

Michigan Technological University | Houghton, MI

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

Expected May 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** for the **human-AI team**.
- Developing **computational models** for different scenarios, e.g., pandemic human travel patterns.
- **Behavioral analysis** of drivers in rail crossings through **statistical models** and semi-structured **interviews**; 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

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](#) | App Development | Video and Photo Editing