

# Tauseef Ibne Mamun

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## SUMMARY

Ph.D. student with specialized training in both *human-computer interaction* and *behavioral psychology*. Have a *strong programming* background. Experience in advanced-level human factors engineering (*qualitative* and *quantitative*) and executing *usability* studies mainly in software and rail warning systems.

### Research Tools/Methods

- Behavioral studies with human subjects
- Usability Evaluation in both real-time and simulated environments (eye-tracking, driving simulator, in-vehicle systems, healthcare systems)
- Cognitive Task Analysis (CTA)
- Computational modeling
- Software development
- Development of R libraries for data management and interpretation

## EXPERIENCES

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

### Research Assistant

2019 – Present

#### Tasks:

- User behavior analysis in autonomous driving for user-centric explanations.
- Designing novel explanation methods for the human-AI teaming.
- Developing computational models for naturalistic decision-making scenarios.
- Behavioral analysis of drivers in rail crossings through mixed-method approach.
- Assessment of the usability of new in-vehicle 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>)

## EDUCATION

Michigan Technological University | Houghton, MI

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

Expected 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

## 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