

Tamzid Hossain

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📍 Tamzid06 • Tamzid Hossain

Education

Northeastern University, Boston, MA

Sept 2025 – Present

Ph.D. in Interdisciplinary Design and Media (in progress)

Research Interest: Extended Reality(XR), Embodied Cognition, and Human Robot Interaction(HRI)

Shahjalal University of Science and Technology

Jan 2018 – Jun 2023

B.Sc. in Computer Science and Engineering

CGPA: **3.94/4.00** | Rank: **1st in a class of 110 students**

Work Experience

Graduate Research Assistant

Sept 2025 – Present

Reality Design Lab, Northeastern University

Current Research: Augmented reality interfaces for everyday use

Lecturer (on leave), United International University

July 2023 – August 2025

Department of Computer Science and Engineering

Course Conducting: **Human Computer Interaction**, Data Structure and Algorithm II & I, Digital Logic Design, Structured Programming Language, Operating Systems.

Research Experience

Augmented Reality Interfaces for Everyday Use

Sept 2025 – Present

- Investigating uni-manual mid-air gesture interaction in AR for everyday context.

Collaborative Sensemaking in Virtual Reality

Jan 2022 – Feb 2023

- The goal of this research is to investigate and analyze the effect of document and task types on multiview layouts patterns, placement strategies and interaction approaches for collaborative sensemaking in Virtual Reality.

Eye- & Head-Based Interaction

June 2020 – May 2021

- The purpose of this research is to explore different aspect of social acceptability and users' preferences of various head- and eye-based interaction techniques with mobile devices.

Publications

- Tamzid Hossain**, Md. Fahimul Islam, William Delamare, Farida Chowdhury, and Khalad Hasan. 2021. Exploring Social Acceptability and Users' Preferences of Head- and Eye-Based Interaction with Mobile Devices. *In 20th International Conference on Mobile and Ubiquitous Multimedia (MUM 2021)*. Association for Computing Machinery, New York, NY, USA, 12–23.
- Shah Murtaza Rashid Al Masud; Homaira Adiba; **Hossain, Tamzid**; Saha, Alope Kumar; Rahman, Rashik. "Development of Interactive Data Visualization System in Three-Dimensional Immersive Space". *In International Journal of Advanced Computer Science and Applications*; West Yorkshire Vol. 14, Iss. 10, (2023). DOI:10.14569/IJACSA.2023.01410108.

Projects

Vibrotactile Indoor Terrain Perception via Wheel-Mounted IMU Sensors

April 2026

- Sensing and perceiving indoor terrain for Terrain-to-Haptic mapping for remote operators in Mecabot mobile robot, using an external wheel-mounted IMU sensor.
- Using **VN-100 IMU** and **ROS2**.

SUST Online Education Portal

December 2021

- An Online Education portal built using **ReactJs**, **NodeJs** and **MongoDB**.
- Collects and shares all the lectures of SUST to the students all over the world.
- Website link : <https://stormy-brushlands-88772.herokuapp.com/>.

- An augmented reality app that helps students understand 3D models and images.
- Built with **Unity**, **Android Studio** (Java, ARcore, XML) and **Firebase** (Authentication, Realtime Database)
- Github link : <https://github.com/Tamzid06/AugmentedReality>.

Multiplayer Combat Game

June 2019

- A **Java** based Side-scrolling, Arcade, Combat game where two player can fight with each other.
- Github link : <https://github.com/Tamzid06/Java-Game>.

Skills and Expertise

XR Developement

- Experienced in developing Augmented Reality and Virtual Reality Application in **Unity**

Competitive programming

- Codeforces Max rank: 1451(specialist) | Handle: WhiteRaven
- Participant at SUST Inter University Programming Contest, 2019

Coding Trainer

- Experienced in training undergrad students in SUST Programming Training Camp

Honors and Awards

Graduate Fellowship (Full Tuition Waiver & Stipend)

2025 – 2030

- Northeastern University, Boston, MA.

University Merit Scholarship

2018 – 2021

- Shahjalal University of Science and Technology.

Achievements

Robotics

- **Champion** in 'Line Following Robot' competition organized by ROBOSUST.
- 2nd runners up in 'ESO ROBOT BANAI' University Level competition organized by CRID and CHANNEL I.

Contest

- Winner of IDEA CONTEST in GPH ispat 'ESO ROBOT BANAI' University Level competition organized by CRID and CHANNEL I.

Technical Strengths

Languages	C, C++, Java, Python, Javascript, HTML, CSS, SQL, Assembly Language
Software & Tools	Unity, Android Studio, Packet tracer, Unreal Engine
Database	MongoDB, MYSQL, PostgreSQL, Prisma, Firebase
Frameworks	ROS 2 Humble, NodeJs, ReactJs, Express, JavaFXGL, ARcore, Mediapipe, Photon PUN

Affiliations

- **Association for Computing Machinery**
Student Member
- **SUST ACM Student Chapter**
Ex-Technical Executive
- **SIGCHI - Special Interest Group on Computer-Human Interaction**
Student Member

References

- Wallace Lages, Assistant Professor
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- Mohammad Khalad Hasan, Assistant Professor
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