

Curriculum Vitae

Marium-E- Jannat

Ph.D. Candidate, Computer Science
Irving K. Barber Faculty of Science
University of British Columbia – Okanagan
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Education

UNIVERSITY OF BRITISH COLUMBIA – OKANAGAN

2022 – Present

Ph.D. Candidate in Computer Science

Thesis Advisor: Dr. Mohammad Khalad Hasan

UNIVERSITY OF BRITISH COLUMBIA – OKANAGAN

2021 – 2022

M.Sc. in Computer Science (Transferred to Ph.D.)

Thesis Advisor: Dr. Mohammad Khalad Hasan

SHAHJALAL UNIVERSITY OF SCIENCE & TECHNOLOGY

2008 – 2012

B.Sc. (Engg.) in Computer Science & Engineering

Department of Computer Science & Engineering

Teaching Experience

TEACHING ASSISTANT

2021 – Present

Department of Computer Science, Mathematics, Physics and Statistics

University of British Columbia – Okanagan, Canada

Courses:

- Fall 2021: [COSC 222] Data Structures
- Winter 2022: [COSC 341] Human-Computer Interaction
- Fall 2022: [COSC 341] Human-Computer Interaction
- Winter 2023: [COSC 360] Web Programming
- Fall 2023: [COSC 341] Human-Computer Interaction
- Winter 2024: [COSC 341] Web Programming
- Summer 2024: [COSC 441/541] Advanced Human-Computer Interaction
- Winter 2025: [COSC 121] Computer Programming II

CCNA INSTRUCTOR

2016 – 2021

Cisco Networking Academy Program

Shahjalal University of Science & Technology, Bangladesh

UNIVERSITY FACULTY MEMBER

2015 – 2021

Department of Computer Science & Engineering,

Shahjalal University of Science & Technology, Bangladesh

Courses Taught:

- Artificial Intelligence [2016, 2017, 2018, 2021]
- Machine Learning [2020]
- Computer Networking [2019, 2020]
- Introduction to Programming Language Python [2019]
- Web Programming and Engineering [2019]
- Project III (3rd Year Final Project) [2018, 2019, 2021]

- Database Management Systems [2017]
- Project II (2nd Year Final Project) [2016, 2017]
- Project I (1st Year Final Project) [2016]
- Computer Graphics and Image Processing [2015, 2016, 2018]
- Introduction to Computing Applications [2015 – 2020]

UNIVERSITY FACULTY MEMBER

2012 – 2015

Department of Computer Science & Engineering,
Sylhet International University, Bangladesh

Courses Taught:

- Artificial Intelligence [2014, 2015]
- Computer Networking [2014]
- Computer Graphics [2014]
- Database Management Systems [2013]
- Computer Programming with C [2013]
- Digital Logic Design [2012, 2013]

Research Interest

My primary research interest is in Human-Computer Interaction (HCI) where I explore users' preferences and design interaction solutions to make efficient human-computer interactivity with smart devices such as smartphone, smartwatch, augmented and virtual reality headsets. My current research areas include:

- Ubiquitous Interface and Interaction
- Mobile and Wearable User Interfaces
- Interaction Techniques

Research Experience

RESEARCH ASSISTANT

2021 – 2024

Okanagan Visualization and Interaction (OVI) Lab, University of British Columbia – Okanagan

As a research assistant, my responsibilities included:

- Created research plans and prototypes for mobile and wearable applications
- Designed and conducted user studies, and used applied quantitative as well as qualitative data analyses
- Wrote project reports and published results in top-ranked human-computer interaction venues
- Mentor undergraduate students and interns

RESEARCH ASSISTANT

2023 - 2024

Project: Navigating the Intersection of Digital Technology, Travel Behavior, and Smartphone usage Implications

A collaboration between UBC integrated Transportation Research (UiTR) Lab and Okanagan Visualization and Interaction (OVI) Lab, University of British Columbia – Okanagan

As a research assistant, my responsibilities included:

- Performing background study
- Designing research plans and prototypes for mobile applications (iOS and Android)
- Data analyses, reporting and writing project reports
- Writing application for research ethics approval

MITACS ACCELERATE INTERN

2022

Advisers: Apurva Narayan and Khalad Hasan, University of British Columbia - Okanagan

As an intern, my responsibilities included:

- Designing and conducting user studies
- Analyzing data and reporting results

Publications

PEER-REVIEWED CONFERENCE PAPERS

Note: The ACM Conference on Human Factors in Computing Systems (CHI) and the IEEE International Symposium on Mixed and Augmented Reality (ISMAR) is considered as the top venues for publishing Human-Computer Interaction research papers focusing interaction with smart devices including Augmented/Virtual Reality interactions (indicated with * in the following list of publications).

[C*.7] **Marium-E- Jannat**, Shukan Miteshkumar Shah, Khalad Hasan. 2025. Exploring Body-Anchored Augmented Reality Interfaces Across Different Mobility and Social Contexts. *The 2025 IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2025)*. Daejeon, South Korea. (Under Review)

[C.6] Jaisie Sin, Satadbi Das, **Marium-E- Jannat**, A K M Amanat Ullah, Nelusha Wattaranthenne, Patricia Lasserre, Jennifer N Boger, Khalad Hasan, Jennifer Jakobi. We Just Talk Like We're Equals: Exploring Active Partnership in Technology Creation with Older Adults. *The 28th ACM SIGCHI Conference on Computer-Supported Cooperative Work & Social Computing (CSCW 2025)*. Bergen, Norway. (Under Review)

[C*.5] **Marium-E- Jannat**, Ngan Phan, Anmol Chadha, Keiko Katsuragawa, and Khalad Hasan. HAI-AR: Exploring Hand-Anchored Interfaces in Augmented Reality while Walking. In *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (CHI 2025)*. Article 612, 1–18. Yokohama, Japan. <https://doi.org/10.1145/3706598.3713858>

[C*.4] **Marium-E- Jannat**, Prateek Dhaka, Keiko Katsuragawa, Khalad Hasan. Exploring Augmented Reality User Interface Transitions Across Mid-Air, On-Body and Physical Surfaces. In *Proceedings of the 2024 IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2024)*. 1177-1186. Bellevue, WA, USA. <https://doi.org/10.1109/ISMAR62088.2024.00134>

[C*.3] **Marium-E- Jannat**, Khalad Hasan. Exploring the Effects of Virtually-Augmented Display Sizes on Users' Spatial Memory in Smartwatches. In *Proceedings of the 2023 IEEE International Symposium on Mixed and Augmented Reality (ISMAR 2023)*. 553-562. Sydney, Australia. <https://doi.org/10.1109/ISMAR59233.2023.00070>

[C.2] Thuan Vo, **Marium-E- Jannat**, Khalad Hasan, David Ahlstrom. FaceUI: Leveraging Front-Facing Camera Input to Access Mid-Air Spatial Interfaces on Smartphones. In *Proceedings of the Graphics Interface 2022 (GI 2022)*. 46 - 58. Montréal, Quebec. <https://doi.org/10.20380/GI2022.06>

[C*.1] **Marium-E- Jannat**, Thuan T Vo, and Khalad Hasan. Face-Centered Spatial User Interfaces on Smartwatches. In *Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems (CHI EA '22)*. Article 393, 1-7. New Orleans, USA. <https://doi.org/10.1145/3491101.3519720>

PEER-REVIEWED JOURNAL PAPERS

Note: The International Journal of Human-Computer Studies (IJHCS) is a Q1 journal which is considered as the top 2% journal for publishing Human-Computer Interaction research papers (indicated with * in the following list of publications).

[J.2] Nelusha Nugegoda, **Marium-E- Jannat**, Khalad Hasan, Patricia Lasserre. Exploring the Effect of Viewing Attributes of Mobile AR Interfaces on Remote Collaborative and Competitive Tasks. In *Proceedings of the IEEE Transactions on Visualization and Computer Graphics*, vol. 30, no. 11, pp. 7288-7298, Nov. 2024. <https://doi.org/10.1109/TVCG.2024.3456177>

[J*.1] **Marium-E- Jannat**, Xing-Dong Yang, Khalad Hasan. Around-device finger input on commodity smartwatches with learning guidance through discoverability. *International Journal of Human-Computer Studies*, Volume 179: 103105, 2023, ISSN 1071-5819. <https://doi.org/10.1016/j.ijhcs.2023.103105>

Scholarships and Awards

SCHOLARSHIPS

University Graduate Research Fellowship, University of British Columbia – Okanagan (\$5000/Year)
Institutional Academic and Research Excellence Scholarship

2022 – 2025

International Four-Year Doctoral Partial Tuition Award, University of British Columbia (\$3900/Year) <i>Institutional International Student Research Scholarship</i>	2022 – 2025
Graduate Dean's Entrance Scholarship, University of British Columbia – Okanagan (\$5000) <i>Institutional Academic Scholarship</i>	2021
Departmental Scholarship, Shahjalal University of Science & Technology <i>Institutional Academic Scholarship</i>	2008 - 2012
Government Scholarship, Ministry of Education, Government of Bangladesh <i>Undergraduate Education Scholarship</i>	2008 - 2012

AWARDS

Honorable Mention Award The ACM Conference on Human Factors in Computing Systems (CHI) <i>International Research Award</i>	2025
Graduate Student Travel Grant, University of British Columbia – Okanagan (\$1000) <i>Institutional Award for Attending International Conference</i>	2023
Special University of BC Okanagan Graduate Award, University of British Columbia – Okanagan (\$1000) <i>Institutional Academic Award</i>	2022

Student Mentoring

UNDERGRADUATE STUDENTS

Anmol Chadha (Summer Intern from NJIT - India) and Ngan Phan ((B.Sc., University of British Columbia – Okanagan) Summer Project with Dr. Mohammad Khalad Hasan. Project title: HAI-AR: Exploring Hand-Anchored Interfaces in Augmented Reality while Walking Led to paper publications at CHI 2025	2024
Prateek Dhaka (Summer Intern from IIT Kharagpur - India) Summer Project with Dr. Mohammad Khalad Hasan. Project title: Exploring Augmented Reality User Interface Transitions Across Mid-Air, On-Body and Physical Surfaces. Led to paper publications at ISMAR 2024	2023
Thuan Vo (B.Sc., University of British Columbia – Okanagan) Work-Study research project with Dr. Mohammad Khalad Hasan. Project title: FaceUI: Leveraging Front-Facing Camera Input to Access Mid-Air Spatial Interfaces on Smartphones. Led to Paper Publication at GI 2022	2021

Professional Services

PROGRAM COMMITTEE

International Conference on Bangla Speech and Language Processing	2018 – 2019
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CONFERENCE REVIEWER

ACM Conference on Human Factors in Computing Systems (CHI)	2021 – Present
ACM Conference on Intelligent User Interface (IUI)	2022 – Present
ACM Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI)	2022 – Present
ACM Conference on Designing Interactive Systems (DIS)	2022 – Present
ACM SIGCHI Conference on Computer-Supported Cooperative Work & Social Computing (CSCW)	2023 – Present
ACM Symposium on Virtual Reality Software and Technology (VRST)	2023
ACM Conference on Mobile and Ubiquitous Multimedia (MUM)	2023
ACM International Conference on Multimedia Retrieval (ICMR)	2023
ACM Symposium on User Interface Software & Technology (UIST)	2021 – 2022

IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR)	2022 – Present
IEEE International Symposium on Mixed and Augmented Reality (ISMAR)	2022 – Present
IEEE International Conference on 4th Industrial Revolution and Beyond (IC4IR)	2021
IEEE International Conference on Computer and Information Technology (ICCIIT)	2016 – 2020

Talks and Presentations

PRESENTATIONS AT INTERNATIONAL CONFERENCES

CHI 2025 – Yokohama, Japan	2025
<i>HAI-AR: Exploring Hand-Anchored Interfaces in Augmented Reality while Walking.</i>	
ISMAR 2024 – Bellevue, WA, USA	2024
<i>Exploring Augmented Reality User Interface Transitions Across Mid-Air, On-Body and Physical Surfaces.</i>	
ISMAR 2023 – Sydney, Australia	2023
<i>Exploring the Effects of Virtually-Augmented Display Sizes on Users' Spatial Memory in Smartwatches.</i>	

Status in Canada

Residency: Temporary Resident on Study Permit (Canada)
 Application for Permanent Residency in Canada is under review

References

Dr. Mohammad Khalad Hasan

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 Co-Director of Program, Masters of Data Science
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 Department of Informatics Systems
 University of Klagenfurt
 Klagenfurt, Austria
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Dr. Keiko Katsuragawa

Adjunct Assistant Professor
 Cheriton School of Computer Science
 University of Waterloo, Canada
 Senior Research Officer
 National Research Council Canada
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