

HASAN SHAHID FERDOUS

Email: hasan.ferdous@unimelb.edu.au

Address: 15/67-69 Delhi Court, Travancore, VIC 3032

Website: <http://www.hsferdous.net>

Phone: +614 0333 9018

Research Interests

Human Computer Interaction, Social Computing, Virtual and Augmented Reality.

Education

Doctor of Philosophy, School of Computing and Information Systems, The University of Melbourne, Australia (Aug. 2013 – May. 2017)

- My PhD research is in the field of Human Computer Interaction (HCI) under the supervision of Professor Frank Vetere and Dr. Hilary Davis.
- In my thesis **Technology at Family Mealtimes**, I have investigated the everyday interactions of familial uses of technology around mealtimes. I have developed a novel system named *TableTalk* that transforms personal smart devices into shared resource and have demonstrated how technology that is sensitive to the needs of family interactions can augment the experience of eating together.
- My expertise includes social computing, qualitative research design, data collection and analysis about collaborative use of technology, natural user interfaces, user-centric design, smartphone app development, etc.

Master of Information Technology (Research), Gippsland School of Information Technology, Monash University, Australia (Mar. 2009 – Sep. 2010)

- Supervisor: Professor Manzur Murshed. Result: **H1 (1st Class Honours)**.
- In my thesis titled **Enhanced IEEE 802.11 by Integrating Multiuser Dynamic OFDMA**, I demonstrated that the collision avoidance protocol in WiFi network is inefficient and redesigned it to provide higher throughput. I proved the validity of the proposal through theoretical analysis and simulation.

Bachelor of Science (Honours) in Computer Science & Engineering, Bangladesh University of Engineering & Technology, Bangladesh (Feb. 2003 – Jan. 2008)

- Result: CGPA **3.86** on a scale of 4.0 (**7th** among 115 graduating students).

Work Experience (Full-Time)

Research Fellow, Microsoft Research Centre for Social NUI, School of Computing and Information Systems, the University of Melbourne (Jun. 2017 – Present)

- In my current position, I am leading various research projects related to virtual, augmented, and mixed reality systems for different social, health, public space, and educational contexts. I am working with various students, research fellows, academic staff members, and industry collaborators in these projects.

Assistant Professor, Dept. of CSE, BUET, Bangladesh (Mar.'13 – Aug.'13)

Lecturer, Dept. of CSE, BUET, Bangladesh (Aug.'08 – Mar.'09, Mar.'11 – Mar.'13)

Lecturer, Dept. of CSE, BRACU, Bangladesh (Jan.'08 – Jul.'08, Jan.'11 – Mar.'11)

- In these positions, I was involved in teaching different theory and lab courses for undergraduate students including structured (C) and object-oriented programming languages (C++, Java, Python), database, microprocessors, assembly language, computer interfacing, numerical methods, and software engineering. I have also supervised 14 undergraduate thesis students in various research projects on social networking, natural user interfaces, and e-learning for autistic children.

Research Experience

- Member of the Microsoft Research Centre for Social NUI and Interaction Design Lab at the School of Computing and Information Systems, the University of Melbourne, Australia. I have been involved in projects about natural user interfaces, augmented & virtual reality, health, education, public space, etc. (Aug. 2013 – Present)
- Visiting research student, Human Experience and Design Group, Microsoft Research, Cambridge, UK. I have collaborated and co-authored with Dr. Kenton O’Hara from this lab since 2013. In 2016, I visited the lab to present my work there and have further discussion with the esteemed researchers at MSR. (Apr. 2016)
- Study Away at the Open Lab, Newcastle University, UK. I have collaborated with Dr. Rob Comber and Dr. Jeremy Farr-Wharton in designing a technology probe related to my PhD research. I have also presented my work there as a part of their Distinguished Lecture Series. (Jan. 2016 – Apr. 2016)
- Member of the Video Processing and Communications Research Group at GSIT, Monash University, Australia. (Mar. 2009 – Mar. 2011)

Grants

Principal Investigator of the project “*A Research Study on Determining the Effect of 3G Mobile Network on the Implementation of e-Governance in Bangladesh*”. Grant (AU \$23K) received from the Ministry of Science and Technology, Govt. of Bangladesh.

Associate Sub-Project Manager of the project “*Development of Mobile Computing Lab for Teaching, Learning, and Research*”. Grant (AU \$280K) from the World Bank’s Academic Innovation Fund (AIF) with Prof. Sohel Rahman and Prof. Mostafa Akbar.

Student Supervision

- **Master of IT thesis** for Coursework Students: One completed and currently supervising another at the University of Melbourne. (2017 - 2018)
- **Undergraduate Thesis Supervision**: I have supervised 14 students at Bangladesh University of Engineering and Technology and BRAC University. (2011 - 2013)

Professional Contributions

- **Associate Chair**: CHI 2018 LBW
- **Organising Committee**: OzCHI (2015, 2016), WHAT 2013, WALCOM 2011
- **Program Committee**: COMPSAC (2017, 2018)
- **Paper Reviewing**: CHI (2015 - 2018), OzCHI (2014 - 2017), ICCIT(2009 - 2011), IMWUT (2017), APPETITE (2017), IEEE VR (2018), MobileHCI (2018)

Notable Publications

1. Hoang, T. N., **Ferdous, H. S.**, Vetere, F., Reinoso, M. Body as a Canvas: An Exploration on the Role of the Body as Display of Digital Information. 2018. Accepted as a Full Paper in Designing Interactive Systems (DIS ’18) Conference.
2. **Ferdous, H. S.**, Vetere, F., Davis, H., Ploderer, B., Comber, R., O’Hara, K., Farr-Wharton, G. Celebratory Technology to Orchestrate the Sharing of Devices and Stories during Family Mealtimes, in Proc. CHI’17 (Ranked A*).
3. Davis, H., **Ferdous, H.S.**, Vetere, F. Table Manners: Children’s Use of Mobile Technologies in Family-friendly Restaurants, in Proc. CHI EA’17 (Ranked A*).
4. **Ferdous, H. S.**, Ploderer, B., Davis, H., Vetere, F., O’Hara, K. Commensality and the Social Use of Technology during Family Mealtime. ACM Transactions on Computer-Human Interaction (TOCHI), 23(6), 2016 (Ranked A*).
5. **Ferdous, H. S.**, Ploderer, B., Davis, H., Vetere, F., O’Hara, K., Farr-Wharton, G., and Comber, R. TableTalk: Integrating Personal Devices and Content for Commensal Experiences at the Family Dinner Table, in Proc. UbiComp’16 (Ranked A*).

6. **Ferdous, H.S.** Technology at Mealttime: Beyond the ‘Ordinary’, in Proc. CHI EA’15. (Ranked A*).
7. **Ferdous, H. S.**, Tasnim, M., Ahmed, S., Anik, T. Social Media Question Asking: A Developing Country Perspective, book chapter in Recommendation and Search in Social Networks, Springer Publications, 2015.
8. **Ferdous, H. S.**, Ploderer, B., Davis, H., Vetere, F., O’Hara, K. Pairing Technology and Meals: A Contextual Enquiry in the Household, in Proc. OzCHI’15.
9. Ahmed, S. I., Jackson S., Ahmed N., **Ferdous, H. S.**, Rifat, M. R., Rizvi, A. S., Ahmed, S., Mansur, R. S. Protibadi: A Platform for Fighting Sexual Harassment in Urban Bangladesh, in Proc. CHI’14 (Ranked A*).
10. Ahmed, S., Anik, M. T. A., Tasnim, M., **Ferdous, H. S.** Statistical Analysis and Implications of SNS search in Under-Developed Countries, in Proc. OzCHI’13.
11. Monir, S., Rubya, S., and **Ferdous, H. S.** Rotation and Scale Invariant Posture Recognition using MS Kinect Skeletal Tracking Feature, in Proc. ISDA’12.

My publications have received **157 citations** (Mar.’18, Google Scholar), h-index: 7, i-10 index: 6.

Notable Awards and Fellowships

Best Paper Award, CIS Doctoral Colloquium, The University of Melbourne	2017
Best Paper Award, CIS Doctoral Colloquium, The University of Melbourne	2016
Google PhD Travel Scholarship & Melbourne Abroad Travel Scholarship	2016
Microsoft Social NUI Top Up Scholarship for PhD research	2015–2017
Fully Funded Scholarship for PhD Research (MIRS & MFRS)	2013–2017
Best Research Poster Award, WECS, Bangladesh	2013
Mentor of team BUET 101, National Champion of Microsoft Imagine Cup	2013
Mentor of team BUET Skull, Runners up in IRC, Techfest, IIT, India	2013
Runner Up in the Three Minute Thesis, Faculty of IT, Monash University	2010
Fully Funded Scholarship for Master of IT (Research) (MGS & GFRS)	2009–2011
Dean’s Award and Merit Scholarship, BUET, in each year of study	2003–2007

Other Work Experiences

Lab Manager, casual position in the Interaction Design Lab, School of Computing and Information Systems, the University of Melbourne (Apr. 2014 – May 2017)

- My duties and responsibilities included assisting other researchers, students, and commercial bodies to set up user-studies, and run workshops for students demonstrating the use of different lab equipment, for example, eye tracking devices, Kinect sensor, video and audio recording instruments, etc.

Substitute Demonstrator, INFO90002: Database Sys. & Info. Model. (Apr. 2017)

Marker, ISYS90085: Interaction Design and Usability (Nov. 2016)

Tutor, COMP90043: Cryptography and Security (Jul. 2014 – Nov. 2014)

- Assisted masters and undergraduate students at the University of Melbourne to solve different problems and research presentations relevant to the course.

References

Frank Vetere, PhD
Professor, School of
Computing & Information
Systems, University of
Melbourne, Australia.
f.vetere@unimelb.edu.au

Bernd Ploderer, PhD
Lecturer in HCI,
Science and Eng. Faculty,
Queensland Univ. of Tech.
Australia.
b.ploderer@qut.edu.au

Kenton O’Hara, PhD
Researcher,
Human Experience and
Design Group, Microsoft
Research Cambridge, UK.
keohar@microsoft.com