# MD. SAMI UDDIN

# PHD STUDENT, THE INTERACTION LAB, COMPUTER SCIENCE, UNIVERSITY OF SASKTATCHEWAN SASKATOON, SASKATCEWAN, CANADA

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#### **EDUCATION**

**Current Status:** Ph.D. student at the Dept. of Computer Science, University of Saskatchewan, Canada **Major:** Human-Computer Interaction (HCI); Supervisor: Dr. Carl Gutwin

Since: September 2016; Tentative Completion Year: 2021

Thesis: Use of Artificial Landmarks to Improve Spatial Learning and Revisitation in Computer

Interfaces

Master of Science (M.Sc.) in Computer Science, University of Saskatchewan, Canada

Year: 2016; Major: Human-Computer Interaction (HCI); Supervisor: Dr. Carl Gutwin

**Thesis:** Improving Multi-Touch Interactions Using Hands as Landmarks

**Bachelor of Science (B.Sc.)** in Computer Science and Information Technology (CIT), Islamic University of Technology (IUT), Dhaka, Bangladesh

Year: 2010

Thesis: A Telerehabilitation System of Hand Skill Development for the Disabled People in Bangladesh

#### RESEARCH INTERESTS

- Human-Computer Interaction (HCI): Interaction Design & Techniques
- Spatial Memory Interfaces
- Bimanual Interactions
- Multi-touch Surfaces
- Artificial Landmarks
- Eye-Tracking

#### **TEACHING EXPERIENCE**

Since January 2015: Teaching Assistant, Computer Science, University of Saskatchewan, Canada

- CMPT 106: Design and Construction of Games and Interactive Systems
- CMPT 111: Introduction to Computer Science and Programming
- CMPT 306: Game Mechanics
- CMPT 381: Implementation of Graphical User Interfaces
- CMPT 481: Human-Computer Interaction

**April 2011 – August 2014:** Lecturer, Department of Computer Science and Engineering (CSE), Ahsanullah University of Science and Technology (AUST), Dhaka, Bangladesh

Courses taught at the undergraduate level:

CSE 1101: Elementary Structured Programming

- CSE 1108: Introduction to Computer Systems
- CSE 200: Software Development II
- CSE 2153: Numerical Method and Programming
- CSE 324: Information System Design and Software Engineering Lab
- CSE 400: Project & Thesis I, CSE 450: Project & Thesis II

## PUBLICATIONS (FULLY REFEREED AND PEER-REVIEWED)

- [11.] **Md. Sami Uddin** and Carl Gutwin. 2021. "The Image of the Interface: How People Use Landmarks to Develop Spatial Memory of Commands in Graphical Interfaces" in Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 21). [In Press] \*\*Among top 3% papers based on reviews.
- [10.] Febi Chajadi, **Md. Sami Uddin**, and Carl Gutwin. 2020. "Effects of Visual Distinctiveness on Learning and Retrieval in Icon Toolbars" in *Proceedings of the Graphics Interface 2020 (GI 20)*, Toronto, Canada, 14 pages.
- [9.] Carl Gutwin, Michael van der Kamp, **Md. Sami Uddin**, Kevin Stanley, Ian Stavness, and Sally Vail. 2019. "Improving Early Navigation in Time-Lapse Video with Spread-Frame Loading" in *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 19)*, Glasgow, Scotland UK, 12 pages. [24% Acceptance rate]
- [8.] Varun Gaur, **Md. Sami Uddin** and Carl Gutwin. 2018. "Multiplexing Spatial Memory: Increasing the Capacity of FastTap Menus with Multiple Tabs" in *Proceedings of the ACM Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI 18)*, Barcelona, Spain, 13 pages. [24% Acceptance rate]
- [7.] Ehsan S. Mollashahi, **Md. Sami Uddin** and Carl Gutwin. 2018. "Improving Revisitation in Long Documents with Two-Level Artificial-Landmark Scrollbars" in *Proceedings of the International Conference on Advanced Visual Interfaces (AVI 18)*, Castiglione della Pescaia, Grosseto, Italy, 9 pages. [25% Acceptance rate]
- [6.] **Md. Sami Uddin,** Carl Gutwin and Alix Goguey. 2017. "Using Artificial Landmarks to Improve Revisitation Performance and Spatial Learning in Linear Control Widgets" in *Proceedings of the ACM Symposium on Spatial User Interaction (SUI 17)*, Brighton, United Kingdom, 48-57. [31% Acceptance rate]
- [5.] **Md. Sami Uddin,** Carl Gutwin and Andy Cockburn. 2017. "The Effects of Artificial Landmarks on Learning and Performance in Spatial-Memory Interfaces" in *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 17)*, Denver, USA, 3843-3855. [25% Acceptance rate]
- [4.] **Md. Sami Uddin** and Carl Gutwin. 2016. "Rapid Command Selection on Multi-Touch Tablets with Single-Handed HandMark Menus" in *Proceedings of the ACM Conference on Interactive Surfaces and Spaces (ISS 16)*, Niagara Falls, Canada. 205-214. [28% Acceptance rate]
- [3.] **Md. Sami Uddin,** Carl Gutwin and Benjamin Lafreniere. 2016. "HandMark Menus: Rapid Command Selection and Large Command Sets on Multi-Touch Displays" in *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 16)*, San Jose, USA, 5836-5848. [23% Acceptance rate]

- [2.] **Md. Sami Uddin,** Varun Gaur, Carl Gutwin and Chanchal K. Roy. 2015. "On the Comprehension of Code Clone Visualizations: A Controlled Study using Eye Tracking" in *Proceedings* of the 15<sup>th</sup> *IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM 15)*, Bremen, Germany. 161-170.
- [1.] **Md. Sami Uddin,** Jahid I. Khan and Hasan Mahmud. 2012. "Designing and Implementing Telerehabilitation on Hand Skill Development for the Disabled People in Bangladesh" in the *International Journal of Software Engineering*. Vol. 5, No.2; Issue: July 2012, 37-49.

### DEMOS, POSTERS, ETC.

- [7.] **Md. Sami Uddin**, and Carl Gutwin. 2019. "A Comparison of Two-Handed and One-Handed Menu Selection Techniques on Touch Tabletops" in *ACM SIGCHI Summer School 2019: Research Methods in HCI Building Bangladesh's Future HCI Professionals*, North South University, Dhaka, Bangladesh.
- [6.] Md. Sami Uddin, and Carl Gutwin. 2018. "A Comparison of Two-Handed and One-Handed Menu Selection Techniques on Tabletops" in *Research Fest 2018*, University of Saskatchewan, Saskatoon, Canada. \*\* People's Choice Award.
- [5.] Ehsan S. Mollashahi, **Md. Sami Uddin** and Carl Gutwin. 2018. "Two-Level Artificial-Landmark Scrollbars to Improve Revisitation in Long Documents" in *Proceedings of Extend Abstract of the International Conference on Advanced Visual Interfaces (AVI 18)*, Castiglione della Pescaia, Grosseto, Italy. 2 pages.
- [4.] Md. Sami Uddin, Carl Gutwin and Alix Goguey. 2017. "Artificial Landmarks Augmented Linear Control Widgets to Improve Spatial Learning and Revisitation Performance" in *Proceedings of the ACM SIGCHI Symposium on Spatial User Interaction (SUI 17)*, Brighton, United Kingdom. 153-153.
- [3.] **Md. Sami Uddin,** Carl Gutwin and Alix Goguey. 2017. "Artificial Landmarks Augmented Media Players for Video Revisitation" in *Graphics Interface (GI 17)*, Edmonton, Alberta. \*\* Best Poster Award.
- [2.] **Md. Sami Uddin** and Carl Gutwin. 2016. "Single-Handed HandMark Menus: Rapid Command Selection on Tablets" in *Proceedings of Extend Abstract of the ACM SIGCHI Conference on Interactive Surfaces and Spaces (ISS 16)*, Niagara Falls, Canada. 453-456.
- [1.] Md. Sami Uddin. 2016. "Use of Landmarks to Design Large and Efficient Command Interfaces" in Proceedings of the ACM Interactive Surfaces and Spaces Companion (ISS Companion 16), Niagara Falls, Canada. 13-17. Doctoral Symposium.

#### PROFESSIONAL AND OUTREACH ACTIVITIES

- Paper reviewing experience:
  - o ACM CHI 2021 Late Breaking Work: Associate Chair (AC)
  - o ACM CHI 2021 Paper: Reviewer
  - o ACM CHI 2020 Late Breaking Work: Associate Chair (AC)
  - o ACM CHI 2020 Paper: Reviewer
  - o ACM CHI 2019 Paper: Reviewer
  - o ACM CHI 2019 Late Breaking Work: Reviewer
  - o Behaviour and Information Technology Journal paper: Reviewer
  - o ACM SUI 2019 Paper: Reviewer

- o ACM ISS 2019 Paper: Reviewer
- o ACM CHI 2018 Paper: Reviewer
- o ACM CHI 2018 Late Breaking Work: Reviewer
- o ACM SUI 2017 Paper: Reviewer
- Student Volunteer at ACM SUI 2017 and ACM MobileHCI 2018 conferences.
  - o Assisted the conference chairs in organizing the conference.

#### • Invited talks:

- o "HCI Research Perspective: Use of Landmarks to Design Large and Efficient Command Interfaces" at the Ahsanullah University of Science & Technology, Bangladesh, January 2017.
- o "Use of Landmarks to Design Large and Efficient Command Interfaces" at the Islamic University of Technology, Bangladesh, January 2017.
- VP-Social, Computer Science Graduate Council at the University of Saskatchewan, Canada.
  - o The academic year 2018-19
  - o The academic year 2019-20
- Volunteer Instructor at Chief Whitecap School, Saskatoon, Canada in 2019.
  - o Helped grade-1 students to learn programming with Scratch.
- Volunteered at GameJam 2015, 2016 arranged by Dept. of CS, UofS, where game enthusiasts and developers gather together in teams to learn, design and make computer games.
- Volunteered at Digitized 2016 and 2018 events arranged by Dept. of CS, UofS.
  - o With workshops, we demonstrated CS research to high school students.
- Organized AUST CSE Fest 2012 and 2013 as a Moderator.
- Coach of AUST Programming Contest teams.
  - o ACM ICPC Asia Regional Dhaka Site: 2011, 2012 & 2013
- Organized IUT National ICT Fest 2008 & 2009 as a Member of IUTCS.