

Neelma Bhatti,

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Skills

Research Areas: Parent-Child Computer Interaction; technologies for families and children; participatory and ethnographic methods; distractions/disorientation; digital childcare assistants.

Methods: Surveys, interviews, probes, auto-ethnography, personas.

Education

Ph.D. in Computer Science

Virginia Tech, Blacksburg, USA

2018-08 - present

PhD Advisory Committee Members: D. Scott McCrickard (Chair, Virginia Tech), Aisling Kelliher (Co-chair, Virginia Tech), Mohammed Saad Seyam (Virginia Tech), Katherine S. Cennamo (Virginia Tech), Alexis Hiniker (University of Washington).

Master of Science: Information Technology

University of Sindh - Pakistan

2013-03 - 2016-03

Bachelor of Science: Information Technology

University of Sindh - Pakistan

2007-01 - 2010-12

Honors and Achievements

- Selected as a principal candidate for the **Fulbright PhD Scholarship Program**.
- Best short paper honorable mention award** at ACM Interaction Design and Children (IDC) conference 2021 for paper "Designing mobile applications to minimize disorientation in informal learning environments".
- Selected as **student volunteer and doctoral consortium participant** at 2020 ACM Interaction Design and Children (IDC) conference.
- Selected to participate in the **Grad Cohort Workshop for Women (CRA-W) 2019**.
- Selected to participate in the **Grad Cohort Workshop for Women (CRA-WP) 2021**.
- Successfully accomplished PhD milestones (qualifier exam, preliminary exam) in a timely manner despite giving birth and raising a child without childcare first during Jan 2018- Dec 2019 and then during initial months of the outbreak of COVID-19 pandemic (March-June 2020).

Publications

Peer-Reviewed conference and journal publications:

- Bhatti, N.**, Kotut, L., Haqq, D., Stelter, T.L., Saaty, M., Kelliher, A. and McCrickard, D.S., 2021. "Parenting, Studying and Working at Home in a Foreign Country: How International Student Mothers in the US Use Screen Media For and With Their Young Children." In Proceedings of the ACM on Human-Computer Interaction, 5(CSCW2), pp.1-25.
- Bhatti, N.**, Saaty, M. and McCrickard, S., 2021, June. "Designing Mobile Applications to Minimize Disorientation in Informal Learning Environments." In ACM Interaction Design and Children (pp. 196-203). (**Best Short Paper Honorable Mention Award**).
- Kotut, L., Bhatti, N., Saaty, M., Haqq, D., Stelter, T.L. and McCrickard, D.S., 2020, April. "Clash of times: Respectful technology space for integrating community stories in intangible exhibits." In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems (pp. 1-13).
- Bhatti, N.**, Ismaili, I.A., Dhomeja, L.D. and McCrickard, D.S., 2020, August. "Revealing And Resolving Disorientation In An Online Course Module Of Java Programming." In 2020 15th International Conference on Computer Science & Education (ICCSE) (pp. 781-786). IEEE.
- Bhatti, N.**, Ismaili, I.A. and Dhomeja, L.D., 2017, March. "Identifying and resolving disorientation in e-learning systems." In 2017 international conference on communication, Computing and Digital Systems (C-CODE) (pp. 169-174). IEEE.
- Mansoor, S., Bhutto, A., **Bhatti, N.**, Aamir Patoli, N. and Ahmed, M., 2017, April. "Improvement of students abilities for quality of software through personal software process." In 2017 International Conference on Innovations in Electrical Engineering and Computational Technologies (ICIEECT) (pp. 1-4). IEEE
- Bhatti, N.**, Dhomeja, L.D. and Malkani, Y.A., 2014, December. "Service discovery protocols in Pervasive Computing: A review." In 17th IEEE International Multi Topic Conference 2014 (pp. 205-210).

Posters, Extended Abstracts and Work-in-Progress papers:

- **(Forthcoming): Bhatti, N.**, Kelliher, A., Hiniker, A., Choi, K., Shahid, S, Ammari, T., Xu, Y., Murad, C., and Michelson, R. 2022. "Technologies For Children At Home: Exploring Ways To Support Caregivers With Child-friendly Media Technologies For The Home." In GROUP '22: ACM International Conference on Supporting Group Work, January 23– 26, 2022, Sanibel Island, FL, USA.
- **Bhatti, N.**, McCrickard, D.S. and Kelliher, A., 2021. "Re-Imagining Digital Technology and Media As Care-Giving Assistant for Parents of Young Children" (No. 6892). CSCW 2021 Workshop on The Future of Care Work: Towards a Radical Politics of Care in CSCW Research and Practice.
- **Bhatti, N.**, Stelter, T.L. and McCrickard, D.S., 2021. "Conversational User Interfaces as Assistive interlocutors For Young Children's Bilingual Language Acquisition." In ACM International Conference on Interactive Media Experiences (IMX '21). Association for Computing Machinery, New York, NY, USA, 208–211.
- **Bhatti, N.**, Stelter, T.L. and McCrickard, D.S., 2020, November. "The Interactive Show: A Conversational Companion for Young Children and Childcare Assistant for Parents." In Proceedings of the 8th ACM International Conference on Human-Agent Interaction (pp. 221-223).
- **Bhatti, N.**, 2020, June. Digital childcare: need of the hour for international student mothers. In Proceedings of the 2020 ACM Interaction Design and Children Conference: Extended Abstracts (pp. 1-4).

Research in Preparation:

- **Bhatti, N.**, McCrickard, D.S., Kelliher, A. "An asset-based approach to elicit in-depth account of users' lived experiences with technology." In preparation for ACM CSCW 2022.
- **Bhatti, N.**, McCrickard, D.S., Kelliher, A." Engaging Stakeholders in Investigating Technology Use in Domestic Environment Using Self-Designed Probes". In preparation for PDC 2022.

Conference Presentations and Invited Talks

- **2021-** Presented my research talk titled "Eliciting Intimate narratives of participants' lived experiences with technology" in the **Social Informatics Meeting at the Center for Human Computer Interaction, Virginia Tech.**
- **2021-** Presented paper titled "Parenting, Studying and Working at Home in a Foreign Country: How International Student Mothers in the US Use Screen Media For and With Their Young Children" at **The 24th ACM Conference on Computer- Supported Cooperative Work and Social Computing.**
- **2021-** Presented a research talk on "Designing Mobile Applications to Minimize Disorientation in Informal Learning Environments" in the **Social Informatics Meeting at the Center for Human Computer Interaction, Virginia Tech.**
- **2021 -** Presented my work-in-progress paper titled "Conversational User Interfaces as Assistive Interlocutors For Young Children's Bilingual Language Acquisition" at **ACM International Conference On Interactive Media Experiences (IMX 2021).**
- **2021-** Presented a tech talk titled "Having to Have It All: Technologies for International Student Mothers and Children in the Multipurpose Home" at **Grad Cohort for Women Workshop (CRA-WP).**
- **2021-** Presented my paper titled "Designing mobile applications to minimize disorientation in informal learning environments" at **ACM Interaction Design and Children (IDC) conference 2021.**
- **2020 -** Presented a research talk titled " Having to Have it All: How International Student Mothers Manage Technology and Children in the Multipurpose Home" in the **Social Informatics Meeting at the Center for Human Computer Interaction, Virginia Tech.**
- **2020 -** Presented Poster titled "The Interactive Show: A Conversational Companion for Young Children and Childcare Assistant for Parents" at the **8th International Conference on Human-Agent Interaction 2020.**
- **2020-** Presented paper titled "Revealing And Resolving Disorientation In An Online Course Module Of Java Programming" at the **IEEE 5th International Conference on Computer Science & Education (ICCSE).**
- **2019 -** Presented poster titled "Nutritional Facts For Online Political Interactions" at the **Grad Cohort for Women Workshop (CRA- W)**
- **2017 -** Presented research titled " Identifying and resolving disorientation in e-learning systems" at the **IEEE International Conference on Communication, Computing and Digital Systems (C-CODE)** at Bahria University Islamabad, Pakistan.
- **2014 -** Presented research article named "Service Discovery Protocols in Pervasive Computing: A review" in the **17th IEEE International Multi Topic Conference (INMIC)** at Bahria University Karachi.

Workshops

- **2022 (forthcoming)-** I will be leading the workshop titled "Technologies For Children At Home: Exploring Ways To Support Caregivers With Child-friendly Media Technologies For The Home" at ACM International Conference on Supporting Group Work (GROUP '22).
- **2021 -** Participated and presented my position paper in two CSCW 2021 workshops "CUI@CSCW: Inclusive and Collaborative Child- facing Voice Technologies" and "The Future of Care Work: Towards a Radical Politics of Care in CSCW Research and Practice".
- **2021-** Presented my position paper in 2021 ACM CHI Conference workshop Let's Talk About CUIs: Putting Conversational User Interface Design Into Practice Participated in ACM Interaction Design

and Children (IDC) conference 2020.

- **2020-** Participated in the ACM IDC 2020 Workshop on "Smart Toys, Smart Tangibles, Robots and other Smart Things for Children".
- **2020-** Participated in Software Carpentries (Unix, Git and Python) workshop organized by Virginia Tech University Libraries.

Teaching

- **Teaching Assistant (2012-03 - 2016-12)**

Faculty of Engineering and Technology, University of Sindh- Pakistan

- Taught courses including Visual Programming (VB.Net), Programming Fundamentals (C++) and Software Engineering Project Management. Additional services included student counseling, event management, and undergraduate thesis and project supervision.

- **Visiting Tutor (2012-01 -2012-06)**

Department of Computer Science, University of Sindh Mirpurkhas Campus - Pakistan

- Taught courses including Visual Programming (VB.Net) and Introduction to Information Technology.

Professional Services

- **Reviewer**, ACM CHI Conference on Human Factors in Computing Systems (CHI 2022), ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2021) and Australian Conference on Human-Computer Interaction (OzCHI 2020).
- **Session Co-Chair**, "International Virtual Conference of Emerging Trends In Computing And Software Engineering-2021", Faculty of Science & Technology, ILMA University, Karachi, Pakistan.
- **Student Volunteer**, ACM Interaction Design and Children (IDC) conference 2020.
- **Bachelors and master's Student Selection Committee Member**, University of Sindh Pakistan 2013-2014.
- **Anchor-person**, Academic Convocation 2011 and 2012 of University of Sindh Jamshoro, Pakistan.
- **Student volunteer**, IEEE student branch IICT, University of Sindh Jamshoro, Pakistan. (2009-2010).