**Academic CV: Muhammad Bilal Khan**

## Education

2023 (present). PhD in Computer Science, Free University of Bozen-Bolzano, Italy
2012 MS in Human-Computer Interaction, Umea University, Sweden
2008 BS in Computer Engineering, Bahria University, Pakistan

## Exchange Studies

March 2026 – June 2026 Visiting PhD Researcher, Università della Svizzera Italiana, Switzerland

## Present Appointment

- Tutor/Assistant for the Programming Fundamentals I & II (Unibz)
- September 2024-27
- National level (Italy)
- Free University of Bozen-Bolzano, Italy
- Supporting the course instructor in delivering lectures, assisting students with coursework, providing guidance during lab sessions, and grading assignments and exams.

## Academic Positions

March 2020–November 2023 Senior Lecturer in the Department of Software Engineering, UCP, Pakistan
September 2018–March 2020 Lecturer in the Department of Computer Science, UoL, Pakistan
September 2015–September 2018 Instructor in the Faculty of Computer Science and Engineering, GIKI, Pakistan

## Administrative Positions

Convener for Outcome-Based Education, Department of Software Engineering, UCP, Pakistan
Course Coordinator for Human–Computer Interaction, Department of Software Engineering, UCP, Pakistan
Co-Patron, ACM UCP Student Chapter, Pakistan
Member of the Examination Committee, Department of Computer Science, UoL, Pakistan
Head of the Debating Society, UoL, Pakistan

## Research and scholarships

PNRR Italian PhD Scholarship, 2023

## Awards

**Best Application Paper Award, mis4TEL Conference 2025**

## Main Research Interest

Child–computer interaction with a focus on storytelling, phygital artefacts for children and people with intellectual disabilities, and the integration of technology to enhance imagination, learning, and narrative experiences.

## Recent Chair Responsibilities in Conferences

2026 Student Chair, AVI, Venice, Italy
2024 Session Chair, mis4TEL, Salamanca, Spain
2023 Conference Secretary, INMIC, UCP, Pakistan

## Publications

### A. Conference Publications – Published (Papers)

1. Gennari, R., **Khan, M. B.,** Melonio, A., & Pellegrino, M. A. (2026). *Comparing Robots and Non-robot Phygital Artefacts in Children's Storytelling via a Systematic Review*. Proceedings of the 21st ACM/IEEE

International Conference on Human-Robot Interaction (HRI 2026). DOI: 10.1145/3757279.3785590. **CORE A*,** Scopus Indexed. **(All authors are in alphabetical order)**

2. Melonio, A., Cicuto, E., **Khan, M. B**., Bellini, M. V., Burro, R., Raccanello, D., & Vicentini, G. (2026). *EmoRainbow: How Can Phygital Artefacts Support Emotional Regulation in Disaster Preparedness?* Proceedings of the 18th International Conference on Advanced Visual Interfaces (AVI 2026). DOI: 10.1145/3811427.3811464. **CORE B**, Scopus Indexed.

3. Mores, M., **Khan, M. B.,** Melonio, A., & Gennari, R. (2025). *Phygital Artefacts and People with Intellectual Disability: A Case Study*. Proceedings of the 16th Biannual Conference of the Italian SIGCHI Chapter (CHItaly 2025). DOI: 10.1145/3750069.3750109. Scopus Indexed.

**4.** Gennari, R., **Khan, M. B.,** & Melonio, A. (2025). *Storytelling and Phygital Artefacts for Preschools: The Case Study of the Hat Atelier*. Proceedings of the 15th International Conference on Methodologies and Intelligent Systems for Technology Enhanced Learning (MIS4TEL 2025). DOI: 10.1007/978-3-032-05070-0_6. Scopus Indexed. **(All authors are in alphabetical order)**

**Best Application Paper Award**

Gennari, R., **Khan, M. B.,** & Melonio, A. (2024). *Storytelling with Technology-Enhanced Artefacts: A Literature Review of Toolkits for Children*. Proceedings of the 14th International Conference on Methodologies and Intelligent Systems for Technology Enhanced Learning (MIS4TEL 2024). DOI: 10.1007/978-3-031-73538-7_22. Scopus Indexed. **(All authors are in alphabetical order)**

5. **Khan, M. B**., Mushtaq, M. T., Khan, S., Asjad, M., Ali, J., & Bilal, J. (2019). *Modified RLS Algorithm for Interference Cancellation in a MIMO System*. Proceedings of the 2019 International Conference on Innovative Computing (ICIC 2019). DOI:10.1109/ICIC48496.2019.8966692. Scopus Indexed

### B. Conference Publications – Demos and Doctoral Consortium

1. **Khan, M. B**., Melonio, A., & Gennari, R. (2026). *poli:bit: a No-Code Toolkit for Creating Phygital Artefacts for Preschools*. Proceedings of the 18th International Conference on Advanced Visual Interfaces (AVI 2026). DOI: 10.1145/3811427.3811493. **CORE B**, Scopus Indexed.

2. **Khan, M. B**. (2025). *Designing Phygital Artefacts With and For Young Children*. CHItaly 2025 Doctoral Consortium. CEUR Workshop Proceedings, Vol. 4151. URL: https://ceur-ws.org/Vol-4151/short2.pdf. Scopus Indexed.

3. **Khan, M. B.** (2024). *How Can (Physical) Computing Be Combined with Storytelling and Play in Pre-School and Early-School Education*. Proceedings of the 18th International Conference on Advanced Visual Interfaces (AVI 2024). DOI: 10.1145/3656650.3656746. **CORE B**, Scopus Indexed.

### C. Journal Publications – Published

1. Ali, U., Shaukat, A., Hussain, M., Ali, J., Khan, K., **Khan, M. B**., & Shah, M. A. (2016). *Automatic Cancerous Tissue Classification Using Discrete Wavelet Transformation and Support Vector Machine*. Journal of Basic and Applied Scientific Research, 6(7), 15–23.