

# Roshni Poddar

## Research Fellow, Microsoft Research India

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### Education

Aug 2018 | PES UNIVERSITY (RR CAMPUS)  
June 2022 | B.Tech, Computer Science & Engineering  
CGPA: 9.17 out of 10

Bangalore, India

### Research Interests

#### Accessible learning through Play

My research interests lie at the intersection of Human-Computer Interaction (HCI) and accessibility. I am deeply passionate about building and evaluating accessible solutions to facilitate learning through play ( Ludic Design for Accessibility [🌐]) through a participatory approach, with a particular focus on the Global South. Currently, my projects involve the development of a sign language quiz platform tailored for the Deaf or Hard-of-Hearing (DHH) community. Additionally, I have been working on a solution to deliver diverse learning experiences, including quizzes, games, and interactive stories, for children with visual impairments. The goal is to enable them to independently enjoy these experiences either over a feature phone or in a classroom.

### Experience

Jul 2022 Present	<b>Microsoft Research India   Technology and Empowerment (TEM)</b> [🌐] <i>Research Fellow   Advisors: Dr. Manohar Swaminathan, Dr. Mohit Jain, Dr. Pratyush Kumar</i> Working on research problems around Human-computer Interaction (HCI) and accessibility in the Global South, specifically in the context of <i>learning, play, and videoconferencing for mixed hearing ability groups.</i>	Bangalore, India
Jan 2022	<i>Research Intern   Advisors: Dr. Manohar Swaminathan, Dr. Mohit Jain, Dr. Pratyush Kumar</i> Developed an Android quiz app based on sign language, similar to Kahoot, co-designed with the DHH community. Conducted a mixed-method study with 20 DHH participants to understand the usability, gameplay behavior, social interaction, and learning aspects of the app.	
June 2021 Dec 2021	<b>Indian Institute of Technology, Madras</b> <i>Intern   Advisor: Dr. Pratyush Kumar</i> Improved the performance of isolated sign language recognition deep learning models.	

### Publications

S=In Submission, C=Conference

- [S.2] **SignIt! An Android Game for Sign Bilingual Play**  
Roshni Poddar\*, Pradyumna YM\*, Divya PJ, Tarini N, Punyat T, Pratyush K, Mohit J, Manohar S (\* = Equal Contribution)  
[In Submission]
- [S.1] **Jod: Examining Design and Implementation of a Videoconferencing Platform for Mixed Hearing Groups**  
Anant M, Meghna G, Roshni Poddar, Tarini N, SeethaLakshmi K, James F, Pratyush K, Mohit J  
[In Submission]
- [C.1] **Challenges faced by the Employed Indian DHH Community**  
Advaith Sridhar, Roshni Poddar, Mohit Jain, Pratyush Kumar  
Proceedings of the 19th IFIP TC13 International Conference on Human-Computer Interaction (INTERACT) [INTERACT'23]

### Skills

<b>Research Methods</b>	Semi-structured Interviews, Survey, Observations, Usability Evaluation, Technology Probes, Participatory Design
<b>Design Tools</b>	Figma (Beginner)
<b>Programming Languages</b>	Kotlin (Expert), Python (Expert), JavaScript (Expert), C++ (Intermediate)