

Hrishikesh Rao

University of Michigan

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Education

- 09/2018 – present **University of Michigan School of Information**
Ann Arbor, MI PhD in Human-Computer Interaction (Pre-Candidate)
Advisor: Sile O'Modhrain, Joyojeet Pal
- 09/2016 – 05/2018 **MSI in Human-Computer Interaction (2018)**
Ann Arbor, MI GPA: 3.6
- 08/2012 – 06/2016 **Manipal Institute of Technology, Manipal University**
Manipal, India B.Tech in Mechatronics

Professional Experience

- 06/2018 – 07/2018 **Smith Kettlewell Eye Research Institute, Visiting Researcher**
San Francisco, CA Developed a design framework for non-braille audio-tactile representation of tactile maps and graphics for visually impaired people, on full page refreshable braille display.
- 06/2017 – 09/2017 **IBM Research, Yorktown Heights, Research Intern**
Yorktown Heights, NY Developed a storytelling framework for soup kitchen agencies to adopt in their campaigns based on the data collected over a period of two decades.
- 02/2016 – 06/2016 **Cisco Systems, Design Intern**
Bengaluru, India Developed an android tool to simplify the deployment and monitoring of LoRa based IOT sensor network on large farmlands and indoor office spaces.

Publications

Conference Publications & Demonstration:

- Conference Publication.01 **Hrishikesh Rao** and Sile O'Modhrain. (2020). *2Across: A Comparison of Audio-Tactile and Screen-Reader based representations of a Crossword Puzzle*. In CHI'20. Honolulu, USA. (Accepted)
- Demo.02 **Hrishikesh Rao** and Sile O'Modhrain. (2019). *Multimodal Representation of Complex Spatial Data*. In Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems (pp. 1-4).
- Demo.01 Alexander Russomanno, **Hrishikesh Rao**, Ihanasarn Tantivirun, Sile O'Modhrain, and R. Brent Gillespie. *A Tactile Display with Touch Sensing using a High-Density Microfluidic Chip*. IEEE Haptics Symposium 2018, San Fransisco, CA

Workshop & Doctoral Consortium:

- Workshop.01 Vaishnav Kameswaran, Maulishree Pandey, Josh Guberman, **Hrishikesh Rao**, Sile O'Modhrain. (2019). *Experiences of Mobility in the Global South: Lessons from People with Visual Impairments in India*, In Hacking Blind Navigation Workshop of the CHI 2019, Glasgow,UK, May 19.

Teaching & Independent work

- 08/2019 – 12/2019
University of Michigan **Simulation Designer – EDUC602, School of Education.**
Worked with 4 PhD students to design a roleplay based simulation exercise for a class of 70 undergraduate students. The objective of the simulation was to simulate how a bill is passed in the Senate. Students were assigned personas to play in the simulation. Students provided assessment and feedback on the learning objectives after the simulation.
- 12/2017 – 06/2018
University of Michigan **Independent Project – Haptix Lab, UM Engineering**
Worked on development and programming of microfluidic braille display to demonstrate co-located input-output braille keyboard and display. Work demonstrated at Haptics Symposium 2018
- 09/2017 – 05/2018
University of Michigan **Teaching Assistant – Career and Internship Studio (S1300, S1505)**
Led discussion among groups of bachelors and masters students to help them apply and secure summer internships. Discussions focused on improving portfolio presentation and describing prior work experience.