Hari Subramonyam

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OVERVIEW

My research sits at the intersection of HCI, AI, and Cognitive Psychology. I design, build, and evaluate interactive intelligent systems for human-critical domains, including learning, creativity, and visual sensemaking. I also develop tools and methods for designing AI-powered applications.

EDUCATION

Expected 04/2021 — **University of Michigan, Ann Arbor, MI**
Ph.D. in Information
Advisor: Eytan Adar
Committee: Eytan Adar (Chair), Colleen Seifert, Steven Drucker, Steve Oney
Dissertation: *Role of End-User Data in Co-Designing AI-Powered Applications*

04/2015 — **University of Michigan, Ann Arbor, MI**
M.S. in Information (Human Computer Interaction)

05/2008 — **CMR Institute of Technology, Bengaluru, India**
B.E. Telecommunication

PROFESSIONAL EXPERIENCE

Summer 2020 — **Microsoft Research, New York, NY**
Research Intern – Fairness, Accountability, Transparency, and Ethics in AI
Mentors: Jenn Wortman Vaughan, and Hanna Wallach

Fall 2017 — **Adobe Research, Seattle, WA**
Research Intern – Creative Intelligence Lab
Mentors: Mira Dontcheva, Wilmot Li

Summer 2016 — **Microsoft Research, Redmond, WA**
Research Intern – Visualization and Interaction for Business and Entertainment
Mentors: Steven Drucker, Curtis Wong

Summer 2015 — **Xerox PARC, Palo Alto, CA**
Research Intern – Interactive Intelligence Lab
Mentor: Ashwin Ram

2011 – 2013 — **Schneider Electric, Bengaluru, India**
Senior Software Developer – Human Machine Interfaces

2008 – 2011 — **SUNGARD, Bengaluru, India**
Software Developer – Workflow Management

AWARDS AND HONORS

04/2020 CHI Best Paper Award [C.5]
05/2019 CHI Best Paper Award [C.3]
05/2015 CHI Student Design Competition 3rd Place

PEER-REVIEWED PUBLICATIONS

CONFERENCE PAPERS

C.5 **Hariharan Subramonyam,** Colleen Seifert, Priti Shah, and Eytan Adar. 2020. texSketch: Active Diagramming through Pen-and-Ink Annotations. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems [Best Paper Award]

C.4 Maulishree Pandey, **Hariharan Subramonyam,** Brooke Sasia, Steve Oney, Sile O'Modhrain. 2020. Explore, Create, Annotate: Designing Digital Drawing Tools with Visually Impaired People. In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems

C.3 **Hariharan Subramonyam,** Steven M. Drucker, and Eytan Adar. 2019. Affinity Lens: Data-Assisted Affinity Diagramming with Augmented Reality. In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19). ACM, New York, NY, USA. [Best Paper Award]

C.2 **Hariharan Subramonyam,** Wilmot Li, Eytan Adar, and Mira Dontcheva. 2018. TakeToons: Script driven Performance Animation. In Proceedings of the 31st Annual ACM Symposium on User Interface Software and Technology (UIST '18). ACM, New York, NY, USA.

C.1 Joyojeet Pal, Anandhi Viswanathan, Priyank Chandra, Anisha Nazareth, Vaishnav Kameswaran, **Hariharan Subramonyam,** Aditya Johri, Mark S. Ackerman, and Sile O'Modhrain. 2017. Agency in Assistive Technology Adoption: Visual Impairment and Smartphone Use in Bangalore. In Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems (CHI '17). ACM, New York, NY, USA.

JOURNAL ARTICLES

J.2 **Hariharan Subramonyam,** Eytan Adar. 2019. SmartCues: A Multitouch Query Approach for Details-on-Demand through Dynamically Computed Overlays. In IEEE Transactions on Visualization and Computer Graphics, vol. 25, no. 1, pp. 597-607, Jan. 2019.

J.1 Brazel, David, Robin Corley, Chanda Phelan, Maia Frieser, **Hariharan Subramonyam,** Sally-Ann Rhea, Helen Vernier, John Hewitt, Paul Resnick, and Scott Vrieze. "The application of ecological momentary assessment and geolocation to a longitudinal twin study of substance use." In BEHAVIOR

GENETICS, vol. 47, no. 6, pp. 676-677. 233 Spring St. New York, NY, USA: SPRINGER, 2017.

DOCTORAL CONSORTIUM

D.1 **Hariharan Subramonyam.** (2019, October). Designing Interactive Intelligent Systems for Human Learning, Creativity, and Sensemaking. In the Adjunct Publication of the 32nd Annual ACM Symposium on User Interface Software and Technology, pp 158–161. Association for Computing Machinery, New York, NY, USA.

WORKSHOPS AND POSTERS

P.3 **Hariharan Subramonyam,** Bongshin Lee, Sile O'Modhrain, and Eytan Adar. 2017. Data dialog: facilitating collaborative decision making through data-driven conversations. In Proceedings of the 11th EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth '17). ACM, New York, NY, USA.

P.2 **Hariharan Subramonyam,** Yuncheng Shen, and Samantha Lauren Jones. 2015. SIGCHI: Enabling Context for Traditional Chinese Paintings with "Rice Paper". In Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '15). ACM, New York, NY, USA, 49-54

P.1 **Hariharan Subramonyam.** 2015. SIGCHI: Magic Mirror - Embodied Interactions for the Quantified Self. In Proceedings of the 33rd Annual ACM Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '15). ACM, New York, NY, USA, 1699-1704.

CURRENT RESEARCH

Hariharan Subramonyam, Colleen Seifert, and Eytan Adar. (2020, November). Data Probes for Co-Creating the AI Design Material *[Under review]*

Hariharan Subramonyam, Colleen Seifert, and Eytan Adar. (2020, November). ProtoAI: Model-Informed Prototyping for AI-Powered Applications *[Under review]*

Hariharan Subramonyam, Jane Im, Colleen Seifert, and Eytan Adar. (2020, November). "They need to learn my language [a little bit]": Leaky abstractions for Co-Designing AI-Powered Applications *[In Prep]*

PATENTS

2020 Hariharan Subramonyam, Eytan Adar, Lubomira Assenova Dontcheva, and Wilmot Wei-Mau Li. "Animation production system." U.S. Patent 10,546,409 issued January 28, 2020.

TEACHING EXPERIENCE

Fall 2018	**SI 649: Information Visualization** Graduate Student Instructor
Fall 2016	**SI 482: Interaction Design** Graduate Student Instructor

INVITED TALKS

Fall 2020	**Ann Arbor Data Dive:** Visualizations for COVID Data [Talk + Workshop]
Winter 2020	**Berea College:** "*Designing Human-AI Applications*" [Talk + Design Workshop]
Winter 2019	**SI 482:** "*Many faces of Interaction Design*"
Winter 2018	**EECS 482***: "Inmates Are Running the Asylum and Why I Think They Should*"
Winter 2017	**SI 612:** "*Lessons from Unboxing the Blackbox*"
Winter 2017	**SI 110:** *"Introduction to Information Visualization"*
Winter 2016	**SI 612:** "*Lessons from Unboxing the Blackbox*"
Fall 2015	**Mobile Developer Community Conference:** *"MTogether: Designing a Living Lab for Social Media Research*"

ACADEMIC SERVICES AND LEADERSHIP

2018-2019	**Michigan Interactive and Social Computing (MISC) Research Group –** Coordinator
2017-2018	**Doctoral Executive Committee –** Representative
Winter 2018	**DOIIIT Maker Space –** Co-Director
2015- 2016	**DOIIIT Maker Space –** Co-Founder

REVIEWER	**2021**	CHI 2021, TEI 2021, CSCW 2021
	2020	CHI 2020, Journal of Cognitive Science, DIS 2020, InfoVis 2020, UIST 2020, Associate Chair – Graphics Interfaces 2020, Program Committee - HAI Workshop at ECAI 2020
	2019	CHI 2019, UIST 2019, DIS 2019, C&C 2019
	2017	CHI 2017
	2016	CHI 2016

STUDENTS MENTORED

2020-Present	Yining (Rima) Cao, Masters, UMSI
2020-Present	Miriam Greenberg, Undergraduate, Art and Design
2019-2020	Blake Wagner, Masters, UMSI
2018-2019	Catherine Lawton, Undergraduate, U of M Psychology
2018-2019	Jane Im, PhD, UMSI
2018-2019	Xiaochuan Kou, Masters, UMSI
2018-2019	Chetan Keshav, Masters, UMSI
2018-2019	Elham Amini, Masters, UMSI
2018-2019	Yu-Cheng Chang, Masters, UMSI
2017-2018	Brian Hall, PhD, UMSI