Stanford

Hariharan Subramonyam

Assistant Professor (Research) of Education and, by courtesy, of Computer Science

Graduate School of Education

🗎 Curriculum Vitae available Online

CONTACT INFORMATION

- **Administrative Support**

  Emily Farrell - Administrative Assistant

  Email farrelle@stanford.edu

Bio

BIO

Hari Subramonyam is an Assistant Professor (Research) at the Graduate School of Education and a Faculty Fellow at Stanford's Institute for Human-Centered AI. He is also a member of the HCI Group at Stanford. His research focuses on augmenting critical human tasks (such as learning, creativity, and sensemaking) with AI by incorporating principles from cognitive psychology. He also investigates support tools for multidisciplinary teams to co-design AI experiences. His work has received multiple best paper awards at top human-computer interaction conferences, including CHI and IUI.

ACADEMIC APPOINTMENTS

- Assistant Professor (Research), Graduate School of Education
- Assistant Professor (Research) (By courtesy), Computer Science

HONORS AND AWARDS

- Student Design Competition 3rd Place, CHI (05/2015)
- Best Paper Award, CHI (05/2019)
- Best Paper Award, CHI (04/2020)

PROFESSIONAL EDUCATION

- Ph.D. Information, University of Michigan , Dissertation: Role of End-User Data in Co-Designing AI-Powered Applications (2021)
- B.E. Telecommunication, CMR Institute of Technology (2008)
- M.S. Information, University of Michigan , Human Computer Interaction (2015)

LINKS

- Personal Website: https://haridecoded.com/

Research & Scholarship

RESEARCH INTERESTS

- Brain and Learning Sciences
- Collaborative Learning

- Data Sciences

- Science Education

- Special Education

- Technology and Education

Teaching

COURSES

2023-24

- Designing Explorable Explanations for Learning: EDUC 432 (Win)

2022-23

- Data Visualization: CS 448B, EDUC 458 (Win)

- Designing Explorable Explanations for Learning: EDUC 432 (Win)

2021-22

- Designing Explorable Explanations for Learning: EDUC 432 (Spr)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Alberto Tono

Master's Program Advisor

Madhumitha Cherukuri, Matías Hoyl, Maho Kohga, . Sreejith Mohan

Doctoral Dissertation Co-Advisor (AC)

Jeongyeon Kim

Doctoral (Program)

Neha Rajagopalan

Publications

PUBLICATIONS

- **Evaluating longitudinal relationships between parental monitoring and substance use in a multi-year, intensive longitudinal study of 670 adolescent twins.** *Frontiers in psychiatry*
  Alexander, J. D., Freis, S. M., Zellers, S. M., Corley, R., Ledbetter, A., Schneider, R. K., Phelan, C., Subramonyam, H., Frieser, M., Rea-Sandin, G., Stocker, M. E., Vernier, H., Jiang, et al
  2023; 14: 1149079

- **How Do Viewers Synthesize Conflicting Information from Data Visualizations?** *IEEE transactions on visualization and computer graphics*
  Mantri, P., Subramonyam, H., Michal, A. L., Xiong, C.
  2022; PP

- **Solving Separation-of-Concerns Problems in Collaborative Design of Human-AI Systems through Leaky Abstractions**
  Subramonyam, H., Im, J., Seifert, C., Adar, E., ACM
  ASSOC COMPUTING MACHINERY.2022

- **VideoSticker: A Tool for Active Viewing and Visual Note-taking from Videos**
  Cao, Y., Subramonyam, H., Adar, E., Assoc Comp Machinery
  ASSOC COMPUTING MACHINERY.2022: 672-690

- **Composites: A Tangible Interaction Paradigm for Visual Data Analysis in Design Practice**
  Subramonyam, H., Adar, E., Drucker, S. M., Bottoni, P., Panizzi, E.
  ASSOC COMPUTING MACHINERY.2022

- **Towards A Process Model for Co-Creating AI Experiences**
  Subramonyam, H., Seifert, C., Adar, E., ACM
  ASSOC COMPUTING MACHINERY.2021: 1529-1543

- **ProtoAI Model-Informed Prototyping for AI-Powered Interfaces**
  Subramonyam, H., Seifert, C., Adar, E., ASSOC COMP MACHINERY
  ASSOC COMPUTING MACHINERY.2021: 48-58

- **texSketch: Active Diagramming through Pen-and-Ink Annotations**
  Subramonyam, H., Seifert, C., Shah, P., Adar, E., ACM
  ASSOC COMPUTING MACHINERY.2020

- **Explore, Create, Annotate: Designing Digital Drawing Tools with Visually Impaired People**
  Pandey, M., Subramonyam, H., Sasia, B., Oney, S., O'Modhrain, S., ACM
  ASSOC COMPUTING MACHINERY.2020

- **Affinity Lens Data-Assisted Affinity Diagramming with Augmented Reality**
  Subramonyam, H., Drucker, S. M., Adar, E., Assoc Comp Machinery
  ASSOC COMPUTING MACHINERY.2019

- **SmartCues: A Multitouch Query Approach for Details-on-Demand through Dynamically Computed Overlays** *IEEE TRANSACTIONS ON VISUALIZATION AND COMPUTER GRAPHICS*
  Subramonyam, H., Adar, E.
  2019; 25 (1): 597-607

- **Designing Interactive Intelligent Systems for Human Learning, Creativity, and Sensemaking**
  Subramonyam, H., ACM
  ASSOC COMPUTING MACHINERY.2019: 158-161

- **TakeToons: Script-driven Performance Animation**
  Subramonyam, H., Li, W., Adar, E., Dontcheva, M., Assoc Comp Machinery
  ASSOC COMPUTING MACHINERY.2018: 663-674

- **The application of ecological momentary assessment and geolocation to a longitudinal twin study of substance use**
  Brazel, D., Corley, R., Phelan, C., Frieser, M., Subramonyam, H., Rhea, S., Vernier, H., Hewitt, J., Resnick, P., Vrieze, S.
  SPRINGER.2017: 676-677

- **Agency in Assistive Technology Adoption: Visual Impairment and Smartphone Use in Bangalore**
  Pal, J., Viswanathan, A., Chandra, P., Nazareth, A., Kameshwaran, V., Subramonyam, H., Johri, A., Ackerman, M. S., O'Modhrain, S., ACM
  ASSOC COMPUTING MACHINERY.2017: 5929-5940