Samir Ghosh

Education

University of California, Santa Cruz
PhD Student in Computational Media
Advisor: Katherine Isbister
Santa Cruz, California
2022 – Present

University of Southern California
BS in Computational Linguistics
BA in Cognitive Science
Los Angeles, California
2018

Honors and scholarships

Dean's Travel Grant	2025
Finalist, UC Santa Cruz Grad Slam	2023
Regents Fellowship	2023
CITRIS Tech For Good Award	2022
Dean's Fellowship	2022

Publications

"Let's Jump into More Creative Avatars and Take this Brainstorm to the Flying Platform:" Playful Prototypes of VR Meeting Support Tools
Anya Osborne, Joshua McVeigh-Schultz, Alexandra Leeds, George Butler, **Samir Ghosh**, and Katherine Isbister
DIS 2025

Introducing Booksnake: A Scholarly App for Transforming Existing Digitized Archival Materials into Life-Size Virtual Objects for Embodied Interaction in Physical Space, using IIIF and Augmented Reality
Sean Fraga, Christy Ye, Henry Huang, Zack Sai, Michael Hughes, April Yao, and **Samir Ghosh**
CHI EA '25

Purposeful XR: Affordances, Challenges, and Speculations for an Ethical Future
Elizabeth Childs, **Samir Ghosh**, Sebastian Cmentowski, Andrea Cuadra, Rabindra Ratan
CHI EA '25

Designing Shared VR Tools for Spatial Scientific Sensemaking About Wildfire Evacuation
Samir Ghosh, Yuhui Wang, Wiliam Zhou, Kelly Lin, Joshua McVeigh-Schultz, and Katherine Isbister.
CHI EA '24

Eye Ball: Gazing as a Dilemma in a Competitive Virtual Reality Game
Michael Lankes, **Samir Ghosh**, Charles Bishop Lesser, and Katherine Isbister.
CHI EA '24

The Cuteness Factor: An Interpretive Framework for Artists, Designers and Engineers

Angela Y.H. Fan, Chen Ji, Ella Dagan, **Samir Ghosh**, Yuhui Wang, Katherine Isbister.
DIS 2023.

| Workshop Papers | **Designing Interaction Approaches for Shared Sensemaking in XR** |

Designing Interaction Approaches for Shared Sensemaking in XR
Samir Ghosh, Joshua McVeigh-Schultz, and Katherine Isbister.
Sensemaking Workshop, CHI '24

Social Physiological Data Awareness in Collocated Mixed Reality Movement
Samir Ghosh, Charles Lesser, Kaia Rae Schweig, Sofia De La Vega Mireles, and Katherine Isbister.
PhysioCHI Workshop, CHI '24

Revealing Aspects of Hawai'i Tourism Using Situated Augmented Reality
Karen Abe, Jules Park, and **Samir Ghosh**
With or Without Permission Workshop, CHI '24

Designing a mixed-initiative multi-user VR interface for wildfire mitigation
Samir Ghosh, Yanglan Wang, Kecheng Cheng, Anthony Angeles, Andrew Moskovich, Kenichi Soga, and Katherine Isbister.
HCI for Climate Change Workshop, CHI 2023.

Selected projects

Booksnake AR
NEH funded iOS AR app displaying assets from the Library of Congress and other archival information. Early design, software architecture, and project management contributions.

Bunker Hill VR
Historical recreation of 1930s downtown Los Angeles using civil engineering data. Project management, documentation, and technical contributions

Stanza Del Segnatura
WebGL 3D app that overlays primary sources over frescoes from The Vatican. Build and distribution contributions.

Bodyscape
Internationally exhibited (e.g. SIGGRAPH, Ars Electronica) wearable technology fashion piece by Behnaz Farahi. Contributions in gait responsive algorithms, circuit design, safety systems, and generative design

Research positions

Graduate Student Researcher, UC Santa Cruz   June 2025 - *present*
Coastal Climate Resilience Center and UC Santa Cruz Visualization Lab

Graduate Student Researcher, UC Santa Cruz   June 2025 - *present*
Catalyst Program, UC Open Source Program Office

Visiting Scholar, Blekinge Institute of Technology May 2025 - June 2025

HINTS Project, Department of Computer Science

Graduate Student Researcher, UC Santa Cruz June 2023 - April 2025
Virtual Reality for Scientific Sensemaking, Social Emotional Technology Lab
Supported by the Sloan Foundation

Industry experience		
Ahmanson Lab USC Harman Academy	Los Angeles, California
Assistant Director	Jan 2019 - Aug 2022
YUR Inc.	Los Angeles, California
VR Developer	Jul 2021 - Dec 2021
Intel Corporation	Santa Clara, California
Intern	Summer 2016, Summer 2018, Fall 2018
Enlighted Inc.	Sunnyvale, California
Intern	Summer 2014

Teaching

Teaching assistant, UC Santa Cruz Winter 2022
CMPM 115: Lead By Design

Seminars, Talks, and Tutorials

Revisiting the for Loop Nov 2023

Slugworks, UC Santa Cruz

A Career in HCI and VR Oct 2023
Cognitive Science Student Association, UC Santa Cruz

Generative Art in Virtual Reality Using p5js Jun 2023
Digital Arts and New Media, UC Santa Cruz

Wildfires in Virtual Reality Mar 2023
UC Santa Cruz Grad Slam, Kuumbwa Jazz Center

Multi-user VR workshop Feb 2023
Digital Arts and New Media, UC Santa Cruz

Surveillance and the Attention Economy Mar 2022
Polymathic Making Workshops, Ahmanson Lab at USC

Computational Art Feb 2022
Polymathic Making Workshops, Ahmanson Lab at USC

WebRTC, WebGL, and other web protocols Jan 2022
Polymathic Making Workshops, Ahmanson Lab at USC

Techniques with Graphics Code Sep 2021 - Oct 2021
Emergent Technology Series, Ahmanson Lab at USC

VR Web Development Sep 2021 - Oct 2021

Emergent Technology Series, Ahmanson Lab at USC

Object recognition, privacy rights, and data collection Sep 2021
Polymathic Making Workshops, Ahmanson Lab at USC

Sensors, lights, and motors Sep 2021
Polymathic Making Workshops, Ahmanson Lab at USC

3D Modeling Basics Sep 2021
Polymathic Making Workshops, Ahmanson Lab at USC

Glitch + D3.js Oct 2020
Generative art-a-thons, Ahmanson Lab at USC

VR with Mozilla Hubs Oct 2020
Generative art-a-thons, Ahmanson Lab at USC

p5js Sep 2020
Generative art-a-thons, Ahmanson Lab at USC

Applied Neural Networks Apr 2020
Polymathic Making Workshops, Ahmanson Lab at USC

Introduction to Creative Code Apr 2020
Polymathic Making Workshops, Ahmanson Lab at USC

STEM Speaker Series Mar 2020
Katherine Johnson STEM Academy

Deepfake Detection Mar 2020
Polymathic Making Workshops, Ahmanson Lab at USC

Practical Arduino Mar 2020
Polymathic Making Workshops, Ahmanson Lab at USC

Data Surveillance and Digital Rights Feb 2020
Polymathic Making Workshops, Ahmanson Lab at USC

Introduction to 3D Printing and the Makerbot Replicator Feb 2020
Polymathic Making Workshops, Ahmanson Lab at USC

Wearable Technology Oct 2019
Polymathic Making Workshops, Ahmanson Lab at USC

Get your own climate data Oct 2019
Polymathic Making Workshops, Ahmanson Lab at USC

Introduction to 3D Printing and the Makerbot Replicator Sep 2019
Polymathic Making Workshops, Ahmanson Lab at USC

Practical Arduino   Sep 2019
Polymathic Making Workshops, Ahmanson Lab at USC

WebVR   Nov 2019
Polymathic Making Workshops, Ahmanson Lab at USC

Promise and Peril of Algorithmic Living   Apr 2018
USC Visions and Voices

Service

Google Summer of Code *UC Open Source Program Office*
Mentor   Summer 2022

Creative Code Collective
Community Lead   2023 – *Present*

Committee for Planning and Budget *Academic Senate, UC Santa Cruz*
Graduate Representative   2023 – *Present*

MIT Reality Hack
Mentor   2025

ACM Halfway to the Future Symposium 2024
Social Media Chair   2023-2024

Google Summer of Code *Processing Foundation*
Mentee, Contributor   Summer 2022

Corpus Callosum (Student Org.) Viterbi School of Engineering, USC
Technical Director   Fall 2015 - Spring 2018

Personal
information

Citizenship: USA
Languages: English (native), French (proficient), Korean (basic)
Email: samir.ghosh@ucsc.edu
Website/Portfolio: samir.tech
Misc. interests: capoeira, open water swimming, creative code