

Samir Ghosh

Updated October 30, 2025

Education

University of California, Santa Cruz
PhD Candidate in Computational Media
Advisor: Katherine Isbister
Expected Graduation: December 2026

Santa Cruz, California
2022 – *Present*

University of Southern California
BS in Computational Linguistics
BA in Cognitive Science

Los Angeles, California
2018

Selected Projects

Coral Reefs, XR, and AI

Ongoing project to display photogrammetry coral reefs integrated with spatial AI tools in XR for restoration and awareness efforts. Uses cutting-edge rendering approaches combined with LLM integration and embodied interface design.

Virtual Reality for Scientific Sensemaking

Multi-year research program in collaboration with civil engineers, marine scientists, and other technical domains to explore how collaborative XR tools can augment the scientific sensemaking process. Supported by the Sloan Foundation.

AI War Cloud

Ars Electronica 2025 piece by Sarah Ciston that illustrates complex relations of AI technology across industry and government. Developed XR views using a bespoke rendering technique. Winner of the S+T+ARTS Grand Prize of the European Commission.

Booksake 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

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

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

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.

Research Positions	Graduate Student Researcher, UC Santa Cruz	June 2025 - <i>present</i>
	Coastal Climate Resilience Center and UC Santa Cruz Visualization Lab	
	Graduate Student Researcher, UC Santa Cruz	June 2025 - <i>present</i>
	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	Virtual Reality and Scientific Sensemaking	June 2025
	Department of Industrial Design, TU Eindhoven, Netherlands	
	Virtual Reality and Scientific Sensemaking	June 2025
	German Aerospace Agency (DLR) Braunschweig, Germany	
	Virtual Reality and Scientific Sensemaking	May 2025
	Department of Computer Science, Blekinge Institute of Technology, Sweden	
	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 Digital Arts and New Media, UC Santa Cruz	Jun 2023
Wildfires in Virtual Reality UC Santa Cruz Grad Slam, Kuumbwa Jazz Center	Mar 2023
Multi-user VR workshop Digital Arts and New Media, UC Santa Cruz	Feb 2023
Surveillance and the Attention Economy Polymathic Making Workshops, Ahmanson Lab at USC	Mar 2022
Computational Art Polymathic Making Workshops, Ahmanson Lab at USC	Feb 2022
WebRTC, WebGL, and other web protocols Polymathic Making Workshops, Ahmanson Lab at USC	Jan 2022
Techniques with Graphics Code Emergent Technology Series, Ahmanson Lab at USC	Sep 2021 - Oct 2021
VR Web Development Emergent Technology Series, Ahmanson Lab at USC	Sep 2021 - Oct 2021
Object recognition, privacy rights, and data collection Polymathic Making Workshops, Ahmanson Lab at USC	Sep 2021
Sensors, lights, and motors Polymathic Making Workshops, Ahmanson Lab at USC	Sep 2021
3D Modeling Basics Polymathic Making Workshops, Ahmanson Lab at USC	Sep 2021
Glitch + D3.js Generative art-a-thons, Ahmanson Lab at USC	Oct 2020
VR with Mozilla Hubs Generative art-a-thons, Ahmanson Lab at USC	Oct 2020
p5js Generative art-a-thons, Ahmanson Lab at USC	Sep 2020
Applied Neural Networks Polymathic Making Workshops, Ahmanson Lab at USC	Apr 2020
Introduction to Creative Code Polymathic Making Workshops, Ahmanson Lab at USC	Apr 2020
STEM Speaker Series Katherine Johnson STEM Academy	Mar 2020

Deepfake Detection Polymathic Making Workshops, Ahmanson Lab at USC	Mar 2020
Practical Arduino Polymathic Making Workshops, Ahmanson Lab at USC	Mar 2020
Data Surveillance and Digital Rights Polymathic Making Workshops, Ahmanson Lab at USC	Feb 2020
Introduction to 3D Printing and the Makerbot Replicator Polymathic Making Workshops, Ahmanson Lab at USC	Feb 2020
Wearable Technology Polymathic Making Workshops, Ahmanson Lab at USC	Oct 2019
Get your own climate data Polymathic Making Workshops, Ahmanson Lab at USC	Oct 2019
Introduction to 3D Printing and the Makerbot Replicator Polymathic Making Workshops, Ahmanson Lab at USC	Sep 2019
Practical Arduino Polymathic Making Workshops, Ahmanson Lab at USC	Sep 2019
WebVR Polymathic Making Workshops, Ahmanson Lab at USC	Nov 2019
Promise and Peril of Algorithmic Living USC Visions and Voices	Apr 2018
Google Summer of Code <i>UC Open Source Program Office</i> Mentor	Summer 2025 (<i>Present</i>)
Creative Code Collective Community Lead	2023 – <i>Present</i>
Committee for Planning and Budget <i>Academic Senate, UC Santa Cruz</i> Graduate Representative	2023 – <i>Present</i>
MIT Reality Hack Mentor	2025
ACM Halfway to the Future Symposium 2024 Social Media Chair	2023-2024
Google Summer of Code <i>Processing Foundation</i> Mentee, Contributor	Summer 2022
Corpus Callosum (Student Org.) Viterbi School of Engineering, USC	

Service

Personal
Information

Citizenship: USA

Languages: English (native), French (proficient), Korean (basic)

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Website/Portfolio: samir.tech

Misc. interests: dance, open water swimming, creative code