# Samir Ghosh

Education University of California, Santa Cruz Santa Cruz, California PhD Candidate in Computational Media 2022 – Present

Advisor: Katherine Isbister

Expected Graduation: December 2026

University of Southern California

BS in Computational Linguistics

BA in Cognitive Science

Los Angeles, California

2018

BA III Cognitive Science

HonorsDean's Travel Grant2025and scholarshipsFinalist, UC Santa Cruz Grad Slam2023Regents Fellowship2023CITRIS Tech For Good Award2022Dean's Fellowship2022

**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.* 

## 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 AcademyLos Angeles, CaliforniaAssistant DirectorJan 2019 - Aug 2022

**YUR Inc.** Los Angeles, California VR Developer Jul 2021 - Dec 2021

Intel CorporationSanta Clara, CaliforniaInternSummer 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 HCl 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 Polymathic Making Workshops, Ahmanson Lab at USC	Jan 2022
<b>Techniques with Graphics Code</b> 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 collecti Polymathic Making Workshops, Ahmanson Lab at USC	•
Sensors, lights, and motors Polymathic Making Workshops, Ahmanson Lab at USC	Sep 2021
<b>3D Modeling Basics</b> 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
<b>p5js</b> Generative art-a-thons, Ahmanson Lab at USC	Sep 2020
<b>Applied Neural Networks</b> 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 Replic 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 2025 (Present)

**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 Citizenship: USA information Languages: Engli

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

Email: samir.ghosh@ucsc.edu Website/Portfolio: samir.tech

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