

Shweta K. Sisodiya, Ph.d. Candidate

sksisodi@ucsc.edu | +1-669-388-2469 | sksisodi.github.io

Professional Summary

- 4+ years of experience in **mixed-methods UX research, Human-Centered AI, LLM-based design and data analysis.**
- 3 years of industry experience as a Data Scientist, applying statistical modeling, data visualization techniques, prompt engineering, machine learning, and NLP pipeline development to deliver actionable business insights.
- 4 years of experience of contributing to **9** (5 product-based and 4 user-focused) research projects with **75+ user interviews, 25+ usability studies, 10+ co-design, 5 machine learning pipelines, 6 taxonomies**, leading to publication at **CHI'26(in review), TOCHI'26, CSCW'25, CHIPLAY'24, FDG'23, HCII'22.**
- 3 years of experience mentoring undergraduate/graduate students and collaborating with research labs at **Stanford, Accenture, Honda Research Institute**, and other labs at the University of California, Santa Cruz.

Work Experience

Phd Researcher, Interaction Dynamics Lab at UCSC, USA Sep 2021 – Present

- **Designed and proposed a novel HCI user research method**, "PDCS," a 90-minute session format that delivered insights comparable to those of year-long ethnographic studies (**under review at CHI '26**).
- **Executed and validated the proposed method ("PDCS")** across two studies with **40+ indian international students**, with 85% reporting higher enjoyment and satisfaction, and yielding **500+ user narratives**.
- **Led the thematic analysis** of user narratives, synthesizing into **2 distinct taxonomies** and **15+ design recommendations** for reimagining LLM tools to better support international students (**accepted at ToCHI '26**).
- Currently using 500+ narratives to establish **benchmarking standards and fine-tune LLMs**, and conducting research on the design of a **human-in-the-loop framework for Agentic AI** to support international students.
- **Designed and implemented LLM-based pipelines for clustering and sentiment analysis** of qualitative data, leveraging **10M+ Reddit comments** via large-scale web scraping.

Summer Research Intern, Honda Research Institute, USA Jun 2023 – Aug 2023

- Led **13 usability studies** with 7 users to identify critical gaps and **proposed of 15+ design changes** to meet user expectations.
- **Proposed a unified strategy** to track, prioritize, and consolidate insights from usability testing conducted by **7+ UX researchers**, improving productivity of the team by **25%**.
- **Designed an interactive dashboard** for real-time visualization of simulator usage metrics and VR eye-tracking data, supporting data-driven design decisions for developers.

Summer Research Intern, Honda Research Institute, USA Jun 2022 – Aug 2022

- **Conducted 12 user interviews**, identified **4 critical expectations and pain points** of using a VR Social Simulator.
- **Led co-design workshop** with 12 users, produced **21 prototype sketches** and **5 designs** to address 80% of user needs.
- **Led 7 usability studies** to validate proposed design against pain points, confirming the user efficacy increased by **20%**.

Data Scientist, Accenture, India Aug 2018 – Aug 2021

- **Developed a fully automated ETL pipeline** with a client-facing bot that reduced approximately **25%** of an analyst's weekly workload bottlenecks to a streamlined and parallel workflow.
- **Led the design of production-grade ML pipelines** to manage hierarchy changes, with statistical reconciliation and NLP to generate historically consistent data and synthetic forecasts for emerging product lines.
- Served three global clients as a forecasting and predictive modeling expert, applying statistical, classification, and NLP methods to deliver actionable insights for business decision-making.

Education

Ph.D. Candidate , University of California, Santa Cruz, USA, Computational Media	Sep 2021 – Dec 2026
B.S. & M.S. , Indian Institute of Technology Roorkee, INDIA, Applied Mathematics	Jul 2013 – May 2018

Skills

- **Generative Research:** Storytelling Methods, Ethnographic Methods, Interviews, Focus Groups, Surveys, Co-design Workshops, Diary Studies, Persona, StoryBorading, Journey Mapping, Participatory Design sessions, Cultural Probes, Context Mapping.
- **Evaluative Research:** LLM-based Analysis, Usability Studies, A/B testing, heuristic evaluation, Thematic Analysis, Grounded Theory, Card-Sorting, Statistical Modeling, Machine Learning (Predictive & Sentiment Analysis), Web Scraping.
- **Tools:** Figma, Notion, Obsidian, Miro, Tableau, Jupyter Notebook, Visual Studio Code.
- **Programming Languages:** Python, HTML, CSS, JavaScript, R, SQL.