Sai Siddartha Maram

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EDUCATION

University of California, Santa Cruz, September 2021-September 2026
Ph.D. Student, Department of Computational Media

- Department Fellowship, NSF Project Funding (2021-2022)
- Graduate Research Assistant (2021-2022)
- UX, Game Motivation Models, Player Modeling, Qualitative Research

Thapar Institute of Engineering and Technology June 2016 - July 2020
Bachelor of Engineering (B.E), Computer Engineering
CGPA: 9.05/10.00

INTERNSHIPS

Meta (Facebook), USA June 2022 - September 2022
Areas : Qualitative UX
Advisor: Dr.Zachary Lamm

- Conducted **User Interviews** with Facebook users to strategize the product for the future of Facebook's *Top of Home*.
- Executed remote **Co-Design** activities with Facebook users to generate design principles and new experiences for Facebook's *Top of Home*.
- Partnered with Leadership, Data Science, and Product Design (XFNs) to develop prototypes for futuristic experiences on Facebook's *Top of Home*.
- Developed a plan to push the prototypes for development and production in the next quarter.

Invento Robotics, India June 2018 - August 2018, July 2020 - May 2021
Areas : Qualitative UX, HRI, HCI, Software
Advisor: CEO Mr.Balaji Vishwanthan

- Conducted **User Interviews** with Stakeholders at various stages of a Robot Deployment pipeline.
- Conducted **Card Sorting** to develop an Information Architecture module for Robotic Fleet management portals.
- Conducted **Ethnographic Studies** to understand the synergy between robots and humans in the Hospitality and Healthcare sectors

Georgia Institute of Technology, USA (GeorgiaTech) June 2019 - Sep 2019
Areas : Qualitative UX, Software, Computer Vision, LiDAR
Advisor: Prof.Yi-Chang Tsai (GeorgiaTech)

- Performed **User Interviews** with Research stakeholders for designing tools for LiDAR data manipulation.
- Developed a platform for 2D images and 3D point cloud registration. Conducted **Moderated Usability tests** on the developed platform.

PUBLICATIONS

AstraVerse: Establishing a Culturally Sensitive Framework for Integrating Elements from Mythological Backgrounds *IFIP-ICEC 2022, Germany*

- Conducted **Participatory design** workshops to understand the creative process behind the creation of Game narratives, Game Mechanics and Game Avatars.
- Conducted **User Interviews** with cultural stakeholders to establish an acceptable representation of cultural elements in video games.

- Conducted **Card Sorting** with game designers to visually classify avatars from mythology and also a **Card Sorting** session with cultural stakeholders to organize game mechanics of mythological characters.
- Used **Thematic Analysis** to finally establish a design taxonomy which provides a balance between engagement and being culturally acceptable.

Gaming Beyond Mortal Boarders *ACM CHI 2022 (Workshop), Germany*
- Conceptualizing how mythical characters can act as protagonists and NPCs in gaming.
- Establishing a position on the representation of Cultural entities in Games.

Gender, Language and Communication *ACM CHI 2022 (Workshop), USA*
- Conducted **Participatory Design Workshops** to understand how people have inherent gender biases.
- Explored professional communication as a medium to study gender biases.
- Conducted **A/B tests** to study the influence of Game Mechanics, Narrative, and Design on bringing out gender biases.

A Data-driven Design of AR Alternate Reality Games to Measure Resilience *HCII'22, Online (BEST PAPER)*
- Conducted **Diary Studies** to understand the lifestyle and pain points of first-year undergraduates in UCSC.
- Developed **personas** of first-year undergraduate students.
- Developed and Designed puzzle games based on these personas to capture resilience.
- Conducted **usability tests**, **A/B** tests of AR applications developed for puzzle games.

Generating Graphs Via Images: Cricket as a test-case
ACM Multimedia 2020 (workshop), Online
- Conceptualized treating a cricket match as a graph problem.
- Automated the generation of graphs through live broadcast. Each edge corresponds to clips of events from the cricket match
- Proposed a querying engine for the graph to extract events from the cricket match.

Images to Signals, Signals to Highlights
IEEE GLOBECOM 2020, Taiwan
- Proposed an innovative solution, to identify events form cricket matches.
- Automated the process of generating highlights. We achieve a wall clock time of 3 minutes to generate highlights of a cricket match; this is a benchmark in the field of highlight generation in cricket.

Neural Network and ROS based Threat Detection and Patrolling Assistance
IEEE ICACCP 2019, India (BEST PAPER)
- Established algorithms on ROS for indoor threat surveillance.
- Trained Object Detection algorithms for weapon detection.

PATENT

A Personal Safety Device and Method Thereof
Patent Application ID (India): 201911005811 (filed)
The prototype involved developing cognitive textile for the first time with computer vision capabilities for protecting women against physical abuse.