

Anika Mahajan

Updated November 2023

Bay Area, CA | anmahaja@ucsc.edu | anika-mahajan.github.io | linkedin.com/in/anika-m/

Education

University of California, Santa Cruz Sept 2019 – June 2023
Bachelor of Science in Computer Science: Computer Game Design
Minors: Astrophysics and Computer Science
GPA: 3.89

Research Experience

ALT Games Lab, UCSC Oct 2020 – Present
Undergraduate Research Assistant
Mentors: Marjorie Ann Cuervo, Dr. Edward Melcer
- Researching how failure design affects player challenge and experience
- Conducting an in-depth literature review regarding gamification, self-care, and quantified self

Creative Coding Lab, UCSC Jan 2020 – Apr 2020
Undergraduate Research Assistant
Mentors: David Abramov
- Working on a data visualization web application for cosmological simulation data

Publications

(In Press): Marjorie Ann Cuervo, **Anika Mahajan**, Josh Mao, and Edward Melcer. (2023). "Try Again?: A Macro-Level Taxonomy of the Challenge and Failure Process in Games". In 2023 IEEE Conference on Games (CoG). IEEE.

Marjorie Ann Cuervo, **Anika Mahajan**, and Edward Melcer. (2021). "Die-r Consequences: Player Experience and the Design of Failure through Respawn Mechanics". In 2021 IEEE Conference on Games (CoG). IEEE.

Work Experience

Lawrence Livermore National Laboratory, Livermore, CA
Computing Scholar Intern July - Sept 2022
- Researching and testing new technologies to connect Java and Python at runtime to modernize their image processing

Lawrence Livermore National Laboratory, Livermore, CA
Computing Scholar Intern June - Sept 2021
- Creating a complete Application Program Interface (API) in Java with full documentation and example class for the Status Verifier to improve automated testing and increase availability

UCSC Campus Natural Reserve, Santa Cruz, CA
Automated Camera Trap Processing Internship Oct - Dec 2023
- Creating an application to automatically detect animal presence within camera trap photos to speed processing of hundreds of camera trap images.

Lawrence Livermore National Laboratory, Livermore, CA

Computing Scholar Intern

June - Sept 2020

- Redesigning the Status Verifier, a mission critical application, in Java for the National Ignition Facility based on the Model-View-Controller design pattern

Honors

Cum Laude, UCSC 2023

Highest Honors in the Major, UCSC 2023

Phi Beta Kappa, Phi Beta Kappa Upsilon Chapter at UCSC 2023

Koret Scholar, Koret Foundation 2022

Presentations
and Workshops

OurCS: Women in Tech Workshop, Carnegie Mellon Oct 2022

- 3 day research-focused workshop for undergrads including creating and presenting a research poster

Fail and Retry: A Taxonomy of Player Challenge and Failure in Virtual Reality Games, UCSC May 2022

- Poster Presentation at Koret Slam 2022

Relevant Courses

ARTG 80G: Visual Communication and Interaction Design

ASTR 118: Physics of Planetary Systems

CMPM 169: Creative Coding

CMPM 177: Creative Strategies for Designing Interactive Media

CSE 140: Artificial Intelligence

PHYS 102: Modern Physics

Skills

Programming: Java, Python, C and Embedded C, C++, C#, HTML, CSS, JavaScript

Libraries and Frameworks: React, p5.js, Phaser, Unity

Interpersonal: Collaboration, Adaptability, Problem-Solving, Mindfulness

Organizations

Slug Shelter

Jan 2021 – Sept 2021

- Researching, planning, and networking to start a shelter for college-aged students experiencing homelessness in Santa Cruz.

[\(News Article\)](#)

Girls Who Code

Aug 2016 – Present

- Member of College Loop Club at UCSC

- Treasurer of Foothill High School GWC Club

- Alumna of Summer Immersion Program 2017 at Pivotal