Sadhana D. Ramani

EDUCATION

University of Southern California (USC) - Anticipated Graduation: May 2026

- Major: Bachelor of Science in Computer Science (Games)
- Minor: Technical Game Art
- GPA: 3.81

ITP380 - Video Game Programming

CSCI201 - Computer Science Principles

CSCI360 - Introduction to AI

WORK EXPERIENCE

USC — *ITP380 Learning Assistant*

01/2024 - PRESENT

- Debugged and resolved technical issues in student C++ code related to gameplay functionality.
- Provided guidance and support to students to enhance their understanding of complex programming concepts.
- Facilitated study sessions and one-on-one meetings to address individual learning needs.

KUMON — Assistant Tutor

07/2021 - 07/2022

- Tutored students in mathematics and reading from Pre-K through High School
- Adapted teaching methods to individual learning styles.
- Encouraged a passion for learning through rewards and praise

RELATED PROJECTS

City Witch — *Lead Developer*

05/2024 - PRESENT

- Lead the development of a story-driven, card-based game using the Unity engine
- Collaborated with a team of artists and writers to ensure cohesive integration of narrative and visual elements
- Implemented 2D sprites and animation into the gameplay using YarnSpinner

Brinkmanship Game - UI & Menu Programmer

07/2023 - 5/2024

- Worked in Unity to implement a functional adventure/mystery game UI
- Cooperated with other student programmers, writers, producers, artists on a 20 person team

Portal (ITP380 Project) - *Gameplay Programmer*

- Used quaternions and matrices to re-create Portal's 1st person puzzles and physics
- Created accurate portal physics and views

Pac-Man (ITP380 Project) - AI Programmer

Recreated unique enemy pathfinding AI from the classic game using finite state-machines

Zelda (ITP380 Project) - Gameplay Programmer

- Used Ascii to cell mapping to re-create *Link to the Past* main area background
- Recreated soldier movement and pathing using node based A* path searching

SKILLS

- **Programming Languages:** C++, Java, Python, C#
- Tools and Software: Unity, Maya, Clip Studio Paint