

COURSEWORK

- Computer Graphics
- Multimedia Systems Design
- 3D Graphics & Rendering
- Analysis of Algorithms
- Advanced Mobile Devices and Game Consoles
- Advanced Game Projects (AGP)

SKILLS

Programming

- Python • C/C++ • Java
- OpenGL • HLSL • C#
- HTML5 • CSS
- PLSQL

Tools

- Autodesk Maya
- Blender 2.8 • Unity
- NetBeans • IntelliJ
- Github • Perforce
- JIRA • Miro
- Oracle SQL Developer

PERSONAL PROJECTS

Drive

Low-poly 3D Animation
(Autodesk Maya 2019)

Paranormal

Low-poly 3D Animation
(Blender 2.8)

INVOLVEMENT

- Women in Animation at USC, Student Club, Lead (2022-2023)
- Attended GHC 22 virtually

EDUCATION

Master's in Computer Science (Multimedia & Creative Technologies)

University of Southern California | GPA : 3.74 | Graduation Date : May, 2023

Bachelor's of Technology in Computer Science

Manipal University Jaipur | CGPA : 9.26 | Graduation Date : Jul, 2018

ACADEMIC PROJECTS

Blindsight: War of Wardens | USC, AGP - Technical Artist

Implemented custom lighting and created stylized manga-like shader graphs for environments in a 3D third-person combat game. (Unity URP Shader Graph, HLSL, C#)

3D Rasterizer | 3D Graphics and Rendering

Developed a 3D rasterizer without using graphics libraries. Implemented wireframe & stylized rendering techniques (toon shading, line art & halftone). (Python)

Ray Tracer | Computer Graphics

Programmed a ray tracer to render opaque surfaces using sphere & triangle intersections with shadows, Phong lighting and shading. (OpenGL, C)

Roller Coaster | Computer Graphics

Created a first-person roller coaster simulation by implementing Catmull-Rom splines & camera transformations. (OpenGL, C)

HyperVideo | Multimedia Systems Design - Group Project

Developed an authoring tool to embed editable links between videos. Created an interactive video player to play & navigate through linked videos. (Java)

EXPERIENCE

CG Tech Art Intern | Soul Machines

Jun, 2022 to Aug, 2022 | Los Angeles, California

- Explored feasibility of introducing Universal Scene Descriptions (USD) within the Digital People production pipeline
- Authored scripts to create textured USD assets from the existing Digital People asset database.
- Developed a tool for visual validation of USD assets in Autodesk Maya

Course Grader | Viterbi School of Engineering, USC

Aug, 2021 to Present | Los Angeles, California

ITP 215 (Introduction to 3D Modeling, Animation & Visual Effects)

ITP 361 (Character Rigging for Games).

- Assisted professor during lectures & labs. Graded assignments & managed logistics for the class.
- Provided support to non-technical users in resolving Maya specific issues.