Aman Singh

Software & Gameplay Programmer

Contact

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Github
https://github.com/amanm007

Portfolio
https://amansinghdev.com

ArtStation
https://www.artstation.com/sssn1pee

Education

2019-2024
Bachelors of Arts, Double Minor(Computing Science, SIAT)
Simon Fraser University, Canada

Technical Skills

- **PROGRAMMING LANGUAGES:**
  C, C++,C#, Java, Python, SQL, Kotlin

- **SOFTWARE:**
  Unity3D, Maya, GIT, Adobe Apps, Figma, Microsoft Visual Studio, Eclipse

Key Skills

- Coding
- Game Development
- Character Modelling/ Texturing
- Game Designing
- UX/UI Design
- Database Management
- Data Structures & Algorithms
- Creative Writing & Oration

Languages

- **English**
- **Hindi**
- **Punjabi**

Technical Project Experience

September 2023-January 2024
Slow & Steady- Rogue-like 2D Shooter Game (Group Project)

- Designed and implemented core **player mechanics**, including **movement**, **shooting**, and a **unique slow-down mechanic**, using Unity's Rigidbody2D and animation state machines.
- Developed AI-powered enemies with **A* Pathfinding**, featuring **patrol**, **chase**, and **dynamic** behavior switching based on player interaction.
- Created **multiple enemy types** with unique behaviors (e.g., **melee**, **ranged**) and **integrated a health system with damage feedback and death animations**.
- Optimized **game performance** by improving **collision detection** and reducing unnecessary computations.

September 2023-January 2024
The Storage- Horror 2D Game (Group Project)

- Lead Game Mechanics Programmer and Sound Designer using **Unity** and C#.
- Developed player mechanics, including movement, animations, and health system, using Unity's **Rigidbody2D** for a responsive gameplay experience.
- Implemented an AI-powered enemy character using **A* Pathfinding**, featuring patrol, chase, and dynamic behavior switching based on player interaction.
- Integrated sound design elements such as footsteps, ambient music, and character-specific sound effects to enhance game immersion.
- Created a real-time health bar **UI** to visually represent player health status and damage feedback.

September 2023(In Progress)
ParadoxRift- Immersive VR Experience (Group Project)

- Configured **XR Rig** for immersive player movement and navigation within the VR environment, enabling both **teleportation and direct locomotion**.
- Implemented intuitive VR input systems to handle complex player actions, including object manipulation and environment interaction.
- Developed a responsive **character controlle**r, integrating collision detection and physics-based movement for a realistic VR experience.
- Scripted a **grabbable object system**, allowing players to interact with items in the game naturally, enhancing the immersive experience.
- Crafted a teleportation system with **custom triggers and anchor**s, enabling seamless navigation through virtual spaces.

July 2023
Advance Fps Movement (Personal Project)

- Currently developing an Advanced Movement FPS game inspired by **Black Ops 3**, incorporating innovative gameplay mechanics and movement systems like **Jetpacking**, **Wallrunning**.
- Implementing realistic and responsive first-person shooting mechanics, including **weapon handling, recoil, and aiming systems.**

May 2023
FPS Game (Personal Project)

- Built an **FPS** Game on **Unity3D** and developing a real world using **integrated** assets**.**
- Implemented various game mechanics and features, including **player movement, shooting mechanics(RayCast), enemy mechanics.**

March 2023
A Toaster's Tale (Academic Team Project)

- Rigged and animated characters in the project using **Maya**.
- Modelled and rigged the hand and the toaster along with the environment lighting.
- Project Website: **https://iat343.framer.website/**

Work Experience

July 2023 - Present
Telus, Vancouver, BC
Part-Time Sales Representative

- Consistently achieve and surpass personal sales targets through effective customer engagement and product knowledge.