Ayan Chavand

Game Software Engineer and Developer

(+91) 90165 90293 | ayan.chavand15@gmail.com | ayanchavand.vercel.app | ayanchavand | ayanchavand

Summary

Game Developer specializing in Unity and Godot with hands-on experience in gameplay systems, graphics programming, and interactive mechanics. Currently a third-year B.Tech (CS) student with professional experience as a game development intern, instructor, and open-source contributor to the Godot engine. Skilled in building prototypes, designing innovative mechanics, and optimizing player experience, with proven results from industry internships, top-ranked game jam projects, and teaching 100+ hours of game development content. Passionate about crafting immersive games that blend technical depth with creative storytelling.

Skills

Programming Languages	C#, C++, GDScript, Python, JavaScript, HLSL, Lua
Game Engines	Unity 3D/2D, Godot Engine 3D/2D, Unreal Engine
Development Tools	Git/GitHub, Visual Studio, Firebase, OpenGL
3D Tools	Blender, Substance Painter

Work Experience

IDZ Digital Private Limited

Mumbai, Maharashtra

Game Development Intern — *Jun. 2024 - Sept. 2024*

- Developed 10+ hyper-casual mobile game prototypes from concept to MVP using Godot Engine (GDScript, C#) and Unity (C#), delivering rapid iteration cycles for market validation.
- Architected reusable component systems and automated build tools in C#, reducing prototype development time by 40% and streamlining deployment workflows for common gameplay mechanics.
- Collaborated with cross-functional design teams to implement gameplay mechanics, incorporating designer feedback to develop an enjoyable prototype

Tutedude

Remote

Game Development Instructor — *Feb. 2025 - Sept. 2025*

- Developed complete 12+ game projects from scratch to demonstrate core mechanics, physics systems, UI implementation, and optimization techniques, serving as practical learning resources for students.
- Designed and delivered comprehensive Unity 2D/3D and Unreal Engine game development curricula, creating 100+ instructional videos totaling 60+ hours of high-quality educational content covering fundamental to advanced concepts.
- Leveraged expertise in Unity and Unreal engine , C# and C++ programming, and game design principles to break down complex topics into digestible modules, enhancing student comprehension and practical application skills.

Projects

Mini OpenGL Renderer [GitHub]

Lightweight C++ OpenGL rendering engine with shader, VAO/VBO, and ImGui integration. — *Sep 2025*

- Developed a modular OpenGL renderer from scratch in C++14, including shader management, VAO/VBO/EBO abstraction, and frame rendering pipeline.
- Implemented real-time lighting and color shaders, demonstrating understanding of GPU pipeline, normal vectors, and transformations.
- Integrated Dear ImGui to create interactive debug and camera windows, allowing live manipulation of scene objects, camera parameters, and rendering modes.
- Built flexible renderer infrastructure supporting multiple 3D objects, transformations, and wireframe/fill toggle, emphasizing clean architecture and extensibility.
- Gained hands-on experience with low-level graphics programming, GPU memory management, and real-time rendering optimizations.

Billy Protocol [GitHub]

Play Here

GMTK Game Jam 2025 - 2.5D puzzle platformer, developed solo in 4 days. — *Aug 2025*

- Achieved top 20% ranking out of almost 10,000 submissions in prestigious GMTK Game Jam, receiving overwhelmingly positive player feedback for innovative ghost-creation mechanics and polished gameplay.
- Single-handedly designed and implemented complete game systems in Unity including player controls, ghost behavior, puzzle mechanics, and level progression within strict 4-day deadline.
- Created all visual assets from scratch including 3D models, textures, animations, and UI elements, demonstrating strong technical art pipeline and asset optimization skills.
- Engineered innovative 2.5D gameplay mechanics where players strategically spawn digital ghosts to solve environmental puzzles, showcasing creative problem-solving and game design expertise.

K.O. *Play Here*

A First Person Parkour Game inspired by One Punch Man and early PlayStation games. *Jul 2024*

- Developed a fast-paced first-person parkour game featuring fluid movement mechanics, wall-running, and combat systems inspired by retro gaming.
- Implemented advanced player movement physics including momentum-based parkour, air control, and combo-based traversal mechanics using Unity3D and C#.
- Engineered responsive combat system with timing-based attacks and movement combinations, showcasing understanding of game feel and player feedback systems.
- Designed and modeled retro-styled environments and character assets, creating cohesive visual identity that blends modern gameplay with PlayStation-era aesthetics.

Open Source Contributions

Godot Engine

Engine and Documentation Contributor

- Solved a Core Engine (C++ codebase) issue related to generation of disconnected spherical meshes due to rounding errors in math functions.
- Contributed to 5+ online and in-engine documentation changes and helped resolve issues reported by the community, ensuring smooth adoption of features.
- Gained hands-on experience with version control (Git/Github), code review processes, and collaborative development workflows.

Education

Institute of Advanced Research

Gandhinagar, Gujarat

Bachelor of Technology (Computer Science) *2023 - Present*

- Currently a third year student

Certifications & Participation

Participation

2024 **Finalist,** Code Kshetra Hackathon *JIMS, Delhi*

Certifications

2023 **Python for Software Engineering**, Chegg inc

2023 **Object Oriented Programming (OOP) in C++**, freeCodeCamp

2023 **C Programming Fundamentals**, UCSC (Coursera)

Extracurricular Activity

Instilt Educate

English Tutor

- Volunteered as an educator for underprivileged children, teaching them English for better access to quality education.
- Proposed various marketing and network activities to raise awareness.