

RAHUL CHANDRA

Game Programmer

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PROFILE

Game Programmer with expertise in **Unreal Engine, C++**, and **Blueprints**, specializing in crafting engaging **player-centric systems** and responsive **game mechanics**. Passionate about creating **immersive gameplay experiences** and skilled in collaborating with **game designers** to bring ideas to life. Strong background in **multiplayer systems, AI interactions**, and **iterative development** for **AAA titles**.

Technical Skills:

- Languages: C++, Blueprints, C#
- Platforms: Unreal Engine, Unity Engine
- Skills: AI Systems, Gameplay Mechanics, Procedural Animation, GUI Systems
- Collaborative Tools: Git, Bitbucket

EXPERIENCE

4+ Years

Unreal/Unity Developer | Freelance

Remote(UK) | Nov 2023 - Present

- I worked on several freelance projects as a Unity and Unreal Engine game developer while pursuing my master's degree at Bournemouth University.
- Delivered client-focused gameplay systems in Unreal and Unity, with a strong emphasis on modular game mechanics, reusable code, and cross-functional collaboration with designers, artists, and animators.
- Built and maintained designer-friendly tools and workflows in C++ to facilitate ease of use, supporting rapid prototyping and level design.

Sr. Game Developer | [BeGames Ltd. \(MVG Studios\)](#)

London, UK | Jan 2022 - Sep 2023

- Developed games that reached No.1 on the UK app store and collaborated with the award-winning band 'The Wombats.' Additionally, developed two games for prominent music industry figures.
- Shipped titles including [The Wombats: Official Game](#), [Mavin All-Stars](#), [TikkyTokkyDropGame](#).
- Collaborated with the art team to design and implement a new UI system using the DO-Tween plugin, improving game performance by 15%.
- Collaborated with designers and artists to integrate gameplay features.
- Implemented Unity Ads, In-App Purchases, and Leaderboards, boosting monetisation and user engagement by 25%, and integrated the Facebook SDK for app metrics.
- Created [Custom Unity Editor Tools](#), automating project folder creation, enhancing Unity project organisation and reducing setup time by 20%.
- Optimised game code and reduced load times by 30%, leading to a decrease in player drop-off rates and an increase in daily active users.

Unity SDE(Augmented Reality Developer) | HoloWorld

Mysore, India | June 2021 - Feb 2022

- Developed interactive GUI systems and modular game elements for AR-based educational games, reducing load times by 35% through optimized code.

Jr. Unity Developer | Piper Play Studio

Bengaluru, India | Dec 2020 - June 2021

- Rapidly prototyped new game ideas, including hyper-casual projects like *Type Climber*, resulting in a 30% faster iteration cycle and aligning with emerging trends.
- Utilised Scriptable Objects for efficient data management, and JSON for saving/loading game states, increasing development speed by 15% and reducing memory usage by 10%.

RELEVANT PROJECTS

[\[LINK\]](#) **Stealth, Parkour and Climbing Mechanics: Unreal Engine | C++ | Blueprints**

- Utilized CharacterMovementComponent and custom C++ classes for smooth character movement and complex interactions, while developing a procedural walk/run animation system with Control Rig for lifelike animations, tailored for stealth gameplay.
- Integrated stealth mechanics and a dynamic parkour traversal system inspired by *Hitman*, featuring alarm systems, interactable objects, and procedural animation techniques to manage stealth states and abilities.

[\[LINK\]](#) **Vehicle Mechanics: Unreal Engine | C++ | Blueprints**

- Developed a Chaos vehicle system with Wheel Suspension entirely in C++, ensuring realistic vehicle dynamics.

- Implemented a Smoke Exhaust system using Niagara, and a Vehicle Skid system for enhanced gameplay realism.

[\[LINK\]](#) **AAA Gameplay Mechanics from Commercial Games: Unreal Engine | C++ | Blueprints**

- Designed and implemented gameplay mechanics inspired by top AAA games, including advanced AI systems, player-driven combat, and interactive GUI. Provided solutions for complex interactions and functionality, ensuring maintainability and extensibility.
- **Combat System (RPG-style):** Created a melee combat system in C++, with features like attack combos, defence, and special abilities.
- **Half-Life / FPS Gunplay Mechanics:** Designed smooth first-person shooting mechanics with weapon handling, ammo management, and interactive physics objects.
- **AI Game Mechanics:** Built AI behaviors such as patrols, vision cones, and reactive states based on proximity, noise, and visual cues.

[\[LINK\]](#) **Procedural Maze Generator Tool(C++, NCCA library and Qt) - C++, PyQt**

- A program that allows the user to generate a maze procedurally using different algorithms. The chosen algorithm affects the maze's branching complexity, path length, and solution difficulty.

EDUCATION

Masters of Science (MSc) | Computer Animation & Visual Effects

Bournemouth University

Bournemouth, England | Sept 2023 - Aug 2024

- **Modules:** Animation Software Engineering, CGI Techniques, CGI Tools, Pipeline and TD, Rendering, Simulation
- **Grade:** Merit

Bachelor of Technology | Computer Science Engineering in Graphics and Gaming

University of Petroleum and Energy Studies

Dehradun, India | 2017 - 2021

- **Modules:** Data Structures and Algorithms, Python, OOPs, Introduction to Graphics and Animation, Game Programming, Computer Graphics, Augmented and Virtual Reality Development
- **Grade:** 3.5 GPA or 2:1

CERTIFICATION

[AI Algorithms for Gaming](#) | LinkedIn

Sep 2020

Certification in AI algorithms for game development, focusing on pathfinding, decision trees, and behavior trees for NPCs.