

SARTHAK SACHDEVA

GAME DEVELOPER | TECHNICAL ART, VFX & PROCEDURAL ANIMATION

Faridabad, India • +91 7678332152 • 2102sarthak@gmail.com • <https://itspixxel.github.io/>

PROFILE

Game Developer and first-class Computer Games Development graduate specialising in procedural animation, real-time VFX and artist-facing Unreal Engine 5 tools. Built Control Rig locomotion, water simulation and procedural environment systems; apply these skills professionally to Roblox character effects, asset integration and performance-sensitive visual workflows.

TECHNICAL SKILLS

Engines / procedural Unreal Engine 5, Control Rig, Blueprints, Niagara, Geometry Scripting, procedural animation, shaders and materials

Programming / content C++, C#, Unity, Blender, Substance Designer/Painter, Photoshop, Roblox Studio, EditableMesh

Production Profiling, procedural mesh and VFX workflows, technical documentation, asset integration, AI-assisted development

SELECTED TECHNICAL ART / VFX PROJECTS

ADAPTIK — Procedural Quadruped Locomotion | UE5 Control Rig · final-year dissertation

- Developed modular procedural gait generation (walk, trot, canter, gallop), terrain-adaptive IK, raycast foot placement and configurable body/limb behaviour.
- Designed for real-time animation and customisable quadruped rigs; documented and evaluated procedural movement against animation requirements.

Neptune — Advanced Ocean System | Unreal Engine 5 · 2025

- Designed water systems for a 30-person collaborative student game, including Gerstner waves, buoyancy, underwater fog/caustics, spline rivers, shoreline foam and artist-exposed controls.

Winternator — Procedural Winter Generator | UE5 Geometry Scripting / C++ · 2024

- Created a procedural winterization tool with snow accumulation, icicle generation, weather effects, customizable materials and live preview for artists.

EMP Kunai — Stylized Gameplay VFX | UE5 Niagara · portfolio project

- Built projectile trails, EMP shockwave/distortion, electric arcs and reaction effects with reusable Blueprint integration and gameplay-readable timing.

PROFESSIONAL EXPERIENCE

Game Developer — Arise Media / Arise Group | Jun 2026–Present

- Directed and integrated character ability VFX, responsive UI and asset pipelines for Roblox studio projects, iterating through visual reviews and in-game playtests.
- Guided procedural Venom effects using EditableMesh and tendrils; helped move complex visuals into 16 baked mesh assets to reduce mobile rendering pressure.
- Used profiling and multi-client QA to catch first-cast stutters, visual replication problems and performance regressions across multiple hero effects.

Games Programming Student Demonstrator — University of Staffordshire | Nov 2024–Feb 2025

Supported Unity/C# practical teaching and debugging.

EDUCATION

BSc (Hons) Computer Games Development — First-Class Honours | Sep 2022–Jun 2025

University of Staffordshire