

SAI SIDHVI GANDIKOTA

Game Designer | UE5 | Systems, Missions & AI | Visual Scripting

LinkedIn [linkedin.com/in/sidhvigandikota](https://www.linkedin.com/in/sidhvigandikota) Portfolio [sidhvigandikota.com](https://www.portfoliosidhvigandikota.com) Email Sidhvi@hotmail.com
Phone +44 7939835434 Location Royal Leamington Spa, UK (Willing to Relocate)

PROFILE

Game designer with hands-on UE5 implementation experience and an AAA QA background across *Atomfall*, *Sniper Elite Resistance*, and *Zombie Army VR*. I design and build gameplay as data-driven logic-branching quests, combat, behavioural AI, progression, and economy—and script it in-engine with node-based tools like Blueprints, State Trees, and the Gameplay Ability System (C++). I'm happy owning a feature end to end: prototyping, documenting, tuning it through personal testing, and reworking it off playtester feedback.

DESIGN PROJECTS (UNREAL ENGINE 5)

Project Whimsical - Open World Action RPG

[sidhvigandikota.com/Whimsical](https://www.sidhvigandikota.com/Whimsical)

- Designed, documented, and implemented a systemic branching quest with attribute-gated gameplay events leading to multiple resolution paths and persistent consequence tracking; authored the quest flow, branching logic, and rulesets, then built them in-engine using node-based visual scripting.
- Built and implemented a 5-state enemy AI (Patrol, Halt, Alert, Combat, Investigate) using State Trees and a custom BPC_AIBrain component; tuned detection ranges and alert thresholds to deliver readable, fair difficulty across player skill levels.
- Designed and implemented a combat system derived from a player attribute framework built on the Gameplay Ability System, so stat investment produces predictable, balanced changes to damage, survivability, and encounter pacing—including a tuned boss encounter.
- Authored a reputation-driven dynamic pricing system (0-100 scale mapped to 1.5x-0.5x price multipliers), a self-balancing economy feature that responds to player behaviour and quest outcomes without per-vendor scripting.

Project Pixel - Turn-Based JRPG

[sidhvigandikota.com/Pixel](https://www.sidhvigandikota.com/Pixel)

- Designed and implemented quest, NPC systems, and gameplay events in UE5 using Data Tables and Blueprints, keeping content data-driven and designer-editable so new quests can be authored without touching underlying logic.
- Architected a 9-element status effect framework with rock-paper-scissors counter logic using GAS, a shared ruleset that scales across all encounters without bespoke per-fight scripting.
- Designed a points-based enemy AI decision system with elemental counter-logic, and tuned move-selection weighting to balance encounter difficulty and readability.
- Built a formula-driven XP and progression economy (escalating thresholds, dual-track progression) and dynamic stat derivation, keeping balance adjustable from data rather than hard-coded values.

PROFESSIONAL EXPERIENCE

QA Analyst

Rebellion Developments

📅 Feb 2024 - Present

📍 Warwick, UK

- Provided structured AI behaviour and encounter design feedback in cross-discipline design and AI review meetings across *Atomfall* and *Sniper Elite Resistance*, identifying discrepancies between intended difficulty, AI, and player-facing outcomes across multiple levels.
- Provided design QA feedback for base game levels and supported post-release content cycles for *Sniper Elite Resistance*, evaluating whether new features and tuning integrated cleanly with existing systems.
- Authored and owned test plans for behavioural AI, game settings, and UI flows across multiple shipped titles, building a holistic understanding of single-player AI architecture, failure modes, and difficulty spikes.
- Tested co-operative multiplayer for *Zombie Army VR*, evaluating AI horde behaviour, spawn balancing, and difficulty scaling on Meta Quest and PSVR 2, feeding structured feedback to the external AI team.

Junior QA Tester

Ubisoft Pune

📅 Nov 2020 - Nov 2021

📍 Pune, India

- Collaborated across multi-studio teams during pre-alpha of *Mario+Rabbids: Sparks of Hope*, a turn-based RPG, contributing to an international co-development pipeline.

- Authored test cases for Sparks and Heroes character systems; delivered structured feedback on ability interactions, mechanics, and systems balance at a critical pre-alpha stage.
- Evaluated enemy AI archetypes across ability interactions and encounter design, delivering targeted behavioural feedback to improve encounter fairness and fun.

TECHNICAL SKILLS

Systems & Combat Design

Systems Design Mechanic Implementation Gameplay Balance Parameter Tuning Difficulty Balancing
Player Progression Economy Design Prototyping

Mission & Quest Design

Quest Design Mission Design Branching Narrative Scripted Events Encounter Design Player Flow
Consequence Systems

AI Design

Behavioural AI Design State Machine Architecture State Trees Utility / Points-Based AI

Engine & Scripting

Unreal Engine 5 Visual Scripting Blueprints C++ Gameplay Ability System (GAS) Data Tables

Documentation & Collaboration

Design Documentation Feature Briefs & Rulesets Player Flow Diagrams Cross-Discipline Collaboration
Playtesting & Iteration Agile / Sprint Delivery Confluence Jira

EDUCATION

M.A. in Game Design

Kingston University, London

📅 Sept 2022 - Sept 2024

B.Sc. in Animation

Adikavi Nannayya University

📅 July 2017 - March 2020

GAME SHIPPING HISTORY

PS4, PS5, Xbox One, Xbox Series, PC

Sniper Elite Resistance

Atomfall

PS5, Xbox Series, PC

Speedball

Project Archipelago (**Unreleased**)

Untitled Game

VR

Zombie Army VR - Meta Quest 2/3, PSVR 2

Tropico VR - Quest 2 (**Uncredited**)

PC - Pre-Alpha

Mario+Rabbids: Sparks of Hope (**Uncredited**)

Mobile

Hitman: Bloodmoney - iOS and Android (**Uncredited**)

Sniper Elite 5 - iOS (**Unreleased**)