Himanshu Kushwah

Ahmedabad hkushwah1789@gmail.com 7897060811 Himanshu Kushwah

Education

Vellore Institute of Technology
B.Tech - CSE (Specialization in Gaming Technology)
Nov 2022 – Ongoing
GPA: 9.03/10

Kendriya Vidyalaya Sangathan, Lucknow
Class XII; Percentage: 93.4% *2022*
Class X; Percentage: 92.8% *2020*

Skills

- **Game Development:** Unreal Engine 5 (Blueprints), Unity 3D (C# Basics)
- **Game Design:** Level design, concept art generation
- **Art & Media Tools:** Krita, Adobe Photoshop, DaVinci Resolve
- **Programming & Databases:** Python, MySQL

Projects

Valdoria: The Lost Capital (Solo Project, Unreal Engine 5) *Feb 2025 – Present*

- Designed and built a semi-open world RPG spanning **5 unique biomes**, each with distinct lighting, terrain, enemy encounters, and boss arenas using **UE5's Nanite landscapes** and **Quixel assets**.
- Engineered a collectible-based progression system where players gather **Solar Hearts** to unlock new areas and advance **9 years** in-game, integrating lore via scattered notes and hidden quests.
- Iteratively improved combat system architecture: transitioned from blueprint duplication → conditional logic → **enums** → **gameplay tags**, showcasing clean state-driven design with scalability in mind.
- Achieved real-time performance of **30–45 FPS on mid-tier hardware**; actively refining shaders, LODs, and landscape streaming for future stability.
- Currently developing an AI system featuring **10+ enemy archetypes**, using **Behavior Trees** to implement patrol, chase, and attack logic.

AR Tennis Game (Group Project, Unity 3D) *Jan 2024 – Apr 2024*

- Developed a real-time **gesture-controlled tennis game** for PC using a webcam, enabling **hands-free interaction** via palm and color-based tracking using **OpenCV** and **Unity**.
- Achieved stable performance of **60 FPS** with near-zero latency using optimized frame processing and a calibrated input zone for palm gestures.
- Implemented **UDP networking** to support continuous left/right gesture input without connection overhead or order dependence, ensuring real-time responsiveness.
- Collaborated in a **5-member team** over 2 months, contributing to gameplay logic and the **computer vision algorithms** showcased during **Project Exhibition 2**.
- **Tools Used:** OpenCV, Python, Unity 3D, TCP/UDP Networking, Computer Vision Algorithms.

Extracurricular Activities and Certifications

Member: Virtual Reality and Gaming Club (VRGC) *Nov. 2022 – Present*

AWS: AWS Solutions Architect – Associate Certification Program *Jan. 2025 – Apr. 2025*

Ethnus: Adobe UI / UX (Graphics Design)

Meta: Unity and C# Basics – Coursera

NPTEL: Foundations of Cyber Physical Systems, IIT Kharagpur

Udemy: UE5 UI Design : Advance Inventory System and Combat Design