### Tushar

Game Developer & Machine Learning Engineer Bridging Creativity and Intelligence Through Technology

### PROFESSIONAL SUMMARY

Game Developer and ML Engineer with expertise in Unity development, AI implementation, and 3D modeling. Proven track record in designing immersive gaming experiences using NavMesh, raycasting, and behavior scripting.

#### **EDUCATION**

## •Bachelor of Computer Application (AI/ML)

Sushant University, Gurgaon

2023-2026 CDA - 7 5 /10 0

CGPA: 7.5/10.0

#### PROJECT EXPERIENCE

## •DeathNight Zombies | First-Person Shooter Game

Architected immersive first-person zombie shooter with advanced enemy AI systems.

- Implemented intelligent enemy behavior using NavMesh agents with sophisticated pathfinding algorithms.
- Engineered core gameplay mechanics including weapon switching and precision raycasting-based shooting.
- Technologies: Unity 3D, C#, NavMesh AI, 3D Modeling, Game Physics

## •Snowman Runner | Endless Runner Game

Developed engaging endless runner with dynamic obstacles and interactive quiz integration.

- Programmed complex gameplay mechanics including obstacle dodging, size transformations, and health tracking.
- Integrated quiz gate system where player responses directly impact progression and scoring.
- Technologies: Unity 3D, C#, Blender, Game Logic Programming

## •Planet AR App | Augmented Reality Application

 $Built\ innovative\ AR\ application\ for\ real-time\ 3D\ planetary\ visualization\ through\ smartphone\ cameras.$ 

- **Developed** advanced AR camera recognition system for seamless 3D model rendering and tracking.
- **Optimized** application performance for smooth real-time rendering across multiple device specifications.
- Technologies: Unity 3D, C#, ARCore/ARKit, 3D Modeling, Mobile Optimization

#### •Basket Blast 3D | Physics-Based Basketball Game

Designed toon-themed basketball game with time-based challenges and progressive difficulty.

- Implemented mouse scroll-based throw force control system with realistic ball physics.
- **Developed** three difficulty modes featuring wind physics simulation and moving target mechanics.
- Created feedback systems with animated popups, particle effects, and audio cues for 60-second gameplay.
- Technologies: Unity 3D, C#, Physics Simulation, UI/UX Design, Particle Systems

# •Chandrayaan Lander 3D Model

 $\label{lem:condition} Created\ high-fidelity\ 3D\ model\ of\ India's\ Chandrayaan\ spacecraft\ for\ visual\ simulation.$ 

- Applied advanced texturing techniques, realistic materials, and lighting for visual accuracy.
- Technologies: Blender, 3D Modeling, PBR Texturing, Rendering

## TECHNICAL SKILLS & CORE COMPETENCIES

Programming Languages: C#, Python, Java, C, JavaScript, HTML5, CSS3

Game Development: Unity 3D, Blender, NavMesh AI, Raycasting, Photon Networking, Game Physics Machine Learning & AI: NumPy, Pandas, Scikit-Learn, Matplotlib, Seaborn, OpenCV, LangChain Specialized Areas: Augmented Reality (AR), Computer Vision, 3D Animation, Mobile Development

Core Competencies: Problem-Solving, Technical Leadership, Cross-Platform Development

### CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

Nexify 2025 Hackathon – Certificate of Participation (24-Hour), ZENITH, Sushant University April 2025

Machine Learning Workshop – Advanced Certification, Zenith FutureForge, Sushant University March 2025