

## Demo Reel



## Skills

- Unity Generalist
- Tools Programming
- 3D Math, Algebra, Calculus
- Technical UI Creation
- Version Control
- Optimization
- Material & Shader Creation
- Particle Systems & VFX
- Generative AI APIs
- Technical Documentation
- Video Editing
- Understanding of 3D, Animation & Rendering Pipeline

## Tools & Languages

- Unity, C#, HLSL
- Python, PyMEL, PyQT
- Adobe XD
- Unreal Engine
- Git, GitHub, Perforce
- Maya
- Photoshop
- Adobe Premiere Pro

## Achievements

- Recipient of the **Gold Medal for Outstanding Innovation** at IIT Gandhinagar.
- Recipient of the **Director Fellowship Award** at FIEA.
- **1 of 100** students selected for Chennai Mathematical Institute in 2019.
- **Ranked #2 Nationally**, Indian Commerce Olympiad (Maths, Aptitude).
- **Top 0.4 percentile** in JEE Mains & **0.3 percentile** in JEE Advanced.
- **Ranked #22**, out of 10k+ participants, Brackeys Game Jam 2021.1.
- **Ranked #1**, Jamboost Game Jam out of 300+ participants, won \$1000.
- Received **Silver Medal** at Inter IIT Tech Meet for IGDC Gamedev Challenge
- Developed games **downloaded over 521K+** and **played 2M+ times**.

# Aniket Rajnish

Technical Artist



## Experience

**Technical Artist & Project Lead, Lockheed Martin** (Jan 2024 - Ongoing)  
*[FIEA Gamelab Contract Project for Lockheed Martin]*

- Working on a VR experience that demonstrates the advantages of JADO and has a 3D Asset Gallery that can be easily edited after development.

**Technical Artist, Dragonfly Games** (Nov 2023 - Ongoing)

*[FIEA Capstone Project for a student run studio]*

- Developed post effects and VFX for the game contributing to its comical look.
- Responsible for all the tool development for the team, automating many tasks.
- Developed an optimized curly hair solution for UE5, reduced its performance overhead by 64x. A document about all my contributions can be found [here](#).

**Technical Art & Design Intern, FIEA** (May 2022 - July 2022)

- Worked as a remote contractor, provided assistance in shader & gameplay programming, and VFX. Curated development logs and documentation about my contribution that can be found [here](#).

**Third Party Developer, CrazyLabs** (Aug 2021 - Mar 2022)

- Partnered as a game studio, and led a team of four, resulting in development of [6 prototypes](#), [30 concept pitches](#) and a market-ready game (unannounced).

**Secretary, Game Dev Club, IIT Gandhinagar** (Aug 2020 - Apr 2021)

*[IIT Gandhinagar Technical Council POR]*

- Guided 100+ game developers about Unity & basics of game development establishing connection with Kwalee, Homa Games & Crazylabs.
- Successfully organized [GameJam 2020 AD](#), the third largest Indian game jam on itch.io at the time, with 600+ people submitting 90+ games.

## Personal Projects

[Collider Optimizer for Unity](#) [300+ stars on Github] [80.lv Article]

- Developed a tool that optimizes Mesh and Polygon Colliders in Unity.
- A C# implementation of the Ramer Douglas Peucker Algorithm is used to smooth polylines and reduce number of paths created by Polygon Colliders.
- A C# implementation of the Quadric Error Metric simplification is used on the shared mesh of the Mesh Collider to reduce its poly count.

[Text to Material for Unity](#)

- Developed a plugin for Unity that generates materials from text prompts in Unity.
- Sets material properties, generates base & normal maps using OpenAI API calls.
- Implemented algorithm to parse material properties from natural language input.

[Multi-Window Synchronization for Windows GUI](#) [300+ stars on Github]

- Developed a windows GUI application using PyQt5 and qtSignal that demonstrates real-time synchronization between multiple window instances.

[C# Implementation of a 4D Raymarching Engine](#)

- Developed a raymarcher that helps render 4D objects and take control of their 4D & 3D transformations. Implemented algorithms for lighting, AO and shadow calculation, compute-buffers, raymarching signed-distance functions, a shader math library for C#, a custom editor to control shape dimensions through editor.

[3D Shapes Dataset Generator](#)

- Developed a GPU-accelerated tool that helps create procedurally generated raymarched 3D shape datasets consisting of 17 primitives & 3 operations.

[Two Opposites](#) (Ranked #22 internationally, Brackeys Game Jam)

- Formulated and developed a [2D Lighting System](#) in C# for Unity using raycasts and Unity started official support for it in a later update.

## Education

**2019 - 23** | IIT GANDHINAGAR | B.Tech, Mechanical Engineering, Design Minor

**2023 - 24** | FIEA, University of Central Florida | MS, Technical Art Major