

ADITYA MONDAL

Gameplay Programmer | Gameplay AI Engineer

Kolkata, West Bengal, India • [GitHub](#) • [LinkedIn](#)

SUMMARY

Final-year B.Tech Computer Science student specializing in Gameplay Programming and AI Systems. Strong foundation in C++, C#, Python, and JavaScript, with hands-on experience building physics-based mechanics, enemy AI behaviors, pathfinding systems (A*), and finite state machines. Passionate about designing intelligent and immersive gameplay systems. Seeking an entry-level Gameplay Programmer or Gameplay AI Engineer role.

EDUCATION

B.Tech in Computer Science Engineering |

Meghnad Saha Institute of Technology | Maulana Abul Kalam Azad University (2022 – 2026)

EXPERIENCE

Frontend Development Intern | VenRoh VR LLP | 2025 | 3 Months

- Developed a responsive internal admin dashboard using React.js and Node.js.
- Implemented a real-time chat system using WebSocket (Socket.io).
- Collaborated in an agile development environment delivering production-ready features.

PROJECTS

Chat App — (MERN) | Link- <https://chattrix-app-g8al.onrender.com>

- Developed full-stack real-time messaging application.
- Implemented WebSocket-based real-time communication.

Auralume — UI Component Library | Link- <https://auralume.onrender.com/>

- Designed reusable 3D UI components using React Three Fiber.
- Published deployable UI library with documentation.

Need for Speed Inspired Racing Game — (Three.js, Cannon-es) | Link- <https://discourse.threejs.org/t/i-have-tried-to-build-a-game-like-need-for-speed-using-cannon-es-and-three-js/86955>

- Developed physics-based vehicle controller with realistic dynamics.
- Implemented AI opponent cars using pursuit steering behaviors.
- Designed race management system with lap tracking and HUD.

Plant & Livestock Disease Detection — (Python, CNN, Deep Learning) | Link- <https://github.com/Aditya02git/PLDD>

- Built CNN model for multi-class disease classification.
- Trained and evaluated model on diverse datasets.

IGI-Inspired First-Person Shooter — (Three.js, Rapier.js)

- Designed and implemented Enemy AI using Finite State Machines (FSM).
- Built player detection logic using raycasting and awareness systems.
- Implemented physics-based movement and collision handling.

TECHNICAL SKILLS

- **Languages:** C++, JavaScript, Python, HTML, CSS, C#
- **Game Development:** Unity, Three.js, React Three Fiber
- **Physics Engine:** Rapier.js, Cannon-es
- **AI & Gameplay:** Finite State Machines (FSM), Pathfinding (A*), Steering Behaviours, Raycasting
- **Machine Learning:** CNN, Deep Learning, NLP Basics
- **Tools:** Git, Blender, MongoDB, Node.js, Express.js, Socket.io
- **Core CS:** Data Structures & Algorithms, OOP