Aditya Mishra

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Education

•KIET Group of Institutions, Ghaziabad *Oct 2021 – Present*

AKTU University B.Tech CSE AIML

Experience

• Unity Developer Intern at IIT Jodhpur - TIH iHUB Drishti *July 2024 – October 2024*

- Contributed to 3+ projects and analyzed 3 research papers, developing and optimizing AR/VR solutions in **C#** and **Unity**, with functionalities such as bounding box visualization, plane detection algorithms, socket interactions, and wire physics simulations, ensuring seamless integration with Android SDKs and APIs.
- Applied 4+ technologies, including Visual-Inertial Odometry **(VIO)**, **Augmented Image Tracking**, **SLAM**, and **plane detection algorithms**, leveraging Unity's **XR Toolkit**, **UI Toolkit**, and **Blender** for precise modeling and design.
- Collaborated with 3+ interdisciplinary teams, troubleshooting and refining solutions while learning advanced localization techniques, AR precision methods, and effective debugging strategies.

Personal Projects

• Quiz game (unity, c#, Firebase ,Database ,sql ,scripting) *Jan '2025 – jan '2025*

- Developed an interactive quiz game using Unity, creating a 3D environment in Blender for an immersive gameplay experience, with a **character control** system implemented in C# for smooth navigation and interaction within the game world.
- Implemented object-oriented programming (**OOP**) principles in C# to structure game logic, improve code maintainability, and enhance scalability, along with designing and maintaining a robust **database management** system to handle user data and game sessions efficiently.
- Integrated Firebase **Firestore** and **Real-time Database** to manage player scores, track progress, and ensure real-time data updates during gameplay, along with Firebase **authentication** for secure player logins and seamless gameplay continuity across sessions.

•IIT jodhpur Navigational Mapping(unity, c#, Firebase, blender, NavMesh, Android) *July '2024 – Sep '2024*

- Used **Unity, ARCore, and Flutter** to develop an Augmented Reality-based navigation system for seamless indoor and outdoor navigation on university campuses, integrating **Visual-Inertial Odometry** for precise localization with 90% more accuracy than GPS, achieving a precision radius of 0.5 meters compared to GPS's 5 meters, and **NavMesh** for pathfinding.
- Implemented **QR code-based positioning** for accurate indoor navigation, utilizing ARFoundation for real-time AR session management, resulting in 85% improved navigation efficiency with continuous positioning and orientation updates during user movement.
- Designed and developed system architecture combining GPS for outdoor navigation and marker-based AR for indoor spaces, integrating **Google Maps API** and managing geospatial data with Flutter for interactive campus maps used by over 150 users during testing.

• 3D Chess Game (.Net , c# ,blender , Unity3D) *Feb 2024 – March 2024*

- Designed a visually stunning 3D chess game modeled in Blender 3D the Unity game engine.
- Established a robust s**erver-client architecture** in .NET for **online multiplayer**, enabling seamless competition between up to 2 players using **Netcode**.
- **Leveraged OOPs** principles to ensure code clarity, maintainability, and scalability for future enhancements.resulting in a 30% reduction in code complexity and a 20% increase in development efficiency

Certifications

•Certified completion of Data Structures and Algorithms (DSA) course via LinkedIn Learning, demonstrating proficiency in core data structures and algorithms, along with expertise in C++ programming covering syntax, variables, pointers, functions, classes, and templates.

Positions of Responsibility

•Directed and facilitated hands-on learning experiences in **3+ boot camps**, empowering over 100 aspiring developers to delve into Game Development, AR/VR, and Unity 3D with practical skills and industry insights.

Achievements

•**Winner** Kumbh Mela Hackathon by UP GOV and IIITA *March '24*

•**Winner** InnoHacks'23 hackathon *May '2023*

•**Winner** Innotech'22 KIET annual Technical Fest *Nov '2022*