Shikhar Bind

③ Portfolio | ♠ github | ☐ linkedin | ◀ shikhar.gamedev@gmail.com | ┕ +91-9648852059

EDUCATION

Indian Institute of Technology Guwahati, India

Bachelors of Technology in Electronics and Electrical Engineering

EXPERIENCE

Parallax Labs

Apr. 2023 - Jul. 2023

2020 - 2024

GPA: 7.91/10.0

XR Developer Fellowship Mumbai, India • Angioplasty Simulator, Developed an immersive Angioplasty VR Simulator using Unity, enabling medical professionals to practice angioplasty procedures in a realistic virtual environment.

- Visual Accessibility Toolkit, Developed a Visual Accessibility Toolkit to simulate colorblindness for developers and make a color correction filter for colorblind players using HLSL and Unity.
- Tech Stack: Unity, SteamVR, Shader Graph, HLSL

PROJECTS

Wickson - the Igniter

Dec. 2023 - Present Google Drive

IGDC GameDev Challenge, Inter IIT 12.0, IIT Madras

- Ideated and developed a 2D puzzle platformer game in Unity for IGDC gamedev challenge of Inter IIT 12.0.
- Supervised a 10-member team, shaping project architecture, and ensuring efficient collaboration.
- Programmed player movement, fire spread mechanism, game manager, and user interface using C#.

Campus Rush Oct. 2021 - Feb. 2022 Coding Club, IIT Guwahati Github

- Ideated and developed a playable virtual recreation of IIT Guwahati with 1500+ downloads in a team of 10 members.
- Programmed game mechanics, scoring system, player movement, animation, and UI in Unity Game Engine and C#.
- Created authentication system and realtime leaderboard using MySQL database and PHP APIs, enhancing user experience.
- Implemented real-time gameplay synchronization between players over network connections using Unity Netcode for GameObjects.

Chiranjeevi GameDev and Esports Club, IIT Guwahati Feb. 2023 - Present

Itch.io

- A 3D roguelike role playing game about a character from Indian Mythology and his battles with Ashuras in Unity.
- Supervised a 5-member programming team for the project, shaping project architecture and ensuring efficient collaboration.
- Ideated and programmed game mechanics, game states and control flow, player movement, and user interface using C#.
- Created various shaders to enhance the visual appeal of the game using Unity Shader Graph.

Scotch Game Engine

Personal Project

Mar. 2023 - Present

Github

- Designed and implemented a 2D game engine using C++ and ImGui on which an interactive software can be developed.
- Implemented graphics renderer with **OpenGL**, optimizing performance for visually appealing scenes.
- Developed an **entity-component system** to manage game objects and behaviors efficiently.

HTG OLX Coding Club, IIT Guwahati June 2022

Github

- Designed and implemented an e-commerce website similar to OLX where one can sell or buy products using **Django** framework.
- Developed user registration, authentication, product listing, and profile management functionalities for seamless UX.
- Utilized Diango's **ORM** to manage the database, ensuring efficient data storage and retrieval.
- Designed intuitive layout and user interface using HTML, CSS, and Bootstrap.

Other Projects

- Devour : A Tower Defense game developed using Unity Game Engine.
- \bullet Ludo \ref{Ludo} : A Ludo game developed in Unity and networked with Photon PUN.
- Shaders : Some shaders and tools made in HLSL or Shader Graph.

Networking Stacks: Photon PUN, Unity Netcode, Socket Programming

TECHNICAL SKILLS

Programming languages: C++, C#, JavaScript*, Python*

Web Technologies: ReactJS, Django, ExpressJS, NodeJS

Database Management: MySQL, MongoDB*

Game Technologies: Unity Game Engine, HLSL

Miscellaneous: Git, Plastic SCM, ImGui

* Elementary proficiency

ACHIEVEMENTS

Inter IIT 12.0	Secured Silver medal for Wickson the Igniter among 23 IITs in the IGDC Gamedev Challenge.	2023
XROS Felllowship '23	Selected as one of 100 fellows among over 10,000 candidates.	2023
Techevince 9.0	Won 'Best Overall Project' award for Chiranjeevi among 100 technical projects.	2023
Techevince 8.0	Won 'Best Overall Project' award for Campus Rush among 110 technical projects.	2022
Respawn Game Jam	Secured 2nd rank among more than 200 candidates in the Game Jam.	2022

Relevant Coursework

Computer Science and Mathematics: Data Structures and Algorithms, Deep Learning, Optimization, Probability, Linear Algebra Game Development: C# programming for Unity Game Development, Data Structures and Design Patterns for Game Developers

Positions of Responsibility

Joint Secretary, GameDev and Esports Club, IIT Guwahati:

2022 - 2023

Reinstated and heading GameDev module of the club to promote game development culture in IIT Guwahati. Organized a game development beginners course and workshops with 500 participants and led 5 game development projects.