
Pavan Kumar Rao

Senior Game Developer

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Github: <https://github.com/PavanKRao-qlp> / Portfolio: <https://pavankrao-qlp.github.io/portfolio>

EXPERIENCE

Dream Game Studios, Pune(India) - *Senior Gameplay Programmer*

DEC 2022 - PRESENT

- Helped build gameplay mechanics such as batting, and integrated cutscenes, and developed various game modes like Quick Match, Tournaments, and Private Lobby.
- Developed tools for design teams to fine-tune and visualize gameplay parameters.
- Implemented frontend architecture utilizing an MVCS-like pattern to optimize load times, facilitating swift integration and rapid iteration of game UI components.
- Implemented metagame features such as player inventory and lineups.

Moonfrog Labs, Bangalore(India) - *Game Developer (SE 2)*

JAN 2020 - NOV 2022

- Migrated the Ludo Club game from Cocos2d-x to Unity3D and refactored the core loop logic to utilize Finite State Machine design pattern.
- Developed and implemented multiple features, including achievements and rewards, on both the server-side using Node.js and the client side using C#.
- Developed functionality for administrative tools and developer tools to support the CSM and QA teams.
- Deployed and monitored server releases in the production environment, and participated in live ops support and bug fixes for Ludo Club.

JumpStart Games, Bangalore(India) - *Associate Game Developer*

JAN 2018 - DEC 2019

- Worked closely with art and design teams to develop gameplay and social features for Neopets: Legends and Letter in Unity3D.
- Worked on bug fixes and live ops and updates of various projects such as World Of Jumpstart, Math Blaster HyperBlast 2 HD, and Neopets: Ghoul Catchers

PROJECTS

Unreal First Person Hack n Slash - *C++ / Unreal*

- Implemented game mechanics leveraging the Gameplay Ability System (GAS) and designed behavior trees to govern enemy AI behavior.

OpenGL Render Engine - C++

- Designed and implemented a component-based rendering engine using C++ and OpenGL. This engine supports various features including loading of 3D models, Blinn-Phong lighting, deferred rendering, and GUI

Unity AI Module- C# / Unity

- Created an AI module incorporating a Heap data structure for efficient A* pathfinding. Additionally, authored a behavior tree framework complete with a custom graph editor for visualizing and debugging AI agent behaviors.

Top-Down Multiplayer Shooter - Unity3D

- Developed and implemented peer-to-peer and server-client-based online multiplayer functionality in Unity/C# utilizing Unity Networking for PC platform.
- Managed the integration of character animations synchronized with movements and actions to enhance the gameplay experience.

EDUCATION

Bharathiar University, Coimbatore - B.Sc(Hons) In Game Development

2014 - 2017

SKILLS

- Proficient with C#, C++, Unity3D, Unreal Engine, And game development.
- Proficient with programming and design patterns.
- Familiar with OpenGL and GLSL
- Well-versed with Version control systems(Git / Perforce) , CI/CD Integrations (Jenkins), And agile/scrum workflows