

# ARJUN M

Unity Developer

Unity Game Developer with 2.8 years of professional experience creating gameplay mechanics, troubleshooting complex systems, integrating SDKs, enhancing project performance and developing productivity solutions for the Unity engine. Skilled at using networking and cloud services to build innovative game systems and committed to continuous learning and delivering high quality results.

## TECHNICAL SKILLS

- Game Engine: Unity
- Programming & Architecture: C#, C++, OOP, Object Pooling, SOLID Principles, Design Patterns (State, FSM, MVC, Observer, Singleton, Command)
- Networking & Backend: Photon (PUN, Fusion), Firebase, PlayFab, AWS, Netcode , Google Cloud
- Monetization: AdMob, Google Ads, Unity Ads, In-App Purchases
- AR : ARCore, ARKit, Kinect, OpenXR
- Rendering: URP, HDRP , Built-In
- DevOps : GitHub, GitHub Actions, Unity Test Framework
- Deployment : Play Store, App Store, WebGL, Unity Asset Store
- Analytics : Firebase Analytics, Profiler

## EDUCATION

CMR UNIVERSITY

2020 - 2023

Bachelor of Computer Applications in Game Development (BCA)

BHAVAN'S

2020

Higher Secondary Certificate (HSC)

## PORTFOLIO

 [frosbyte.github.io/Portfolio/](https://frosbyte.github.io/Portfolio/)

 [github.com/FROSBYTE](https://github.com/FROSBYTE)

## WORK EXPERIENCE

APP MECHANIC, London

FEB 2023 - AUG 2025

Unity Game Developer

- Implemented diverse input modalities: Kinect-based body tracking, Logitech/Thrustmaster wheel integration, and gamepad controls.
- Implemented multiplayer and online backends with PlayFab, Photon, Firebase and AWS, online leaderboards, analytics and monetization.

Projects worked on :

Endless Runner Game : Windows

- Developed a 3D endless runner with Microsoft Kinect support, enabling body motion control and seamless Unity integration.
- Implemented batching, occlusion culling, and object pooling to enhance game performance, and integrated an online leaderboard.

Golf Game : Android, IOS

- Developed authentication with Google, Apple, and guest logins using PlayFab, along with a synchronized shop system for in-app purchases.
- Optimized memory and performance through object pooling, cutting garbage collection spikes by 10% and improving frame consistency.

Match-3 Puzzle Game : Android

- Developed secure authentication with Firebase and integrated AWS GameOn for real-time multiplayer and tournament management.
- Implemented online leaderboards , performance analytics, monetization ads and in-app purchases.

Driving Simulator : Windows

- Developed core vehicle driving functionality with additional support for Logitech and Thrustmaster wheels.
- Designed multiple levels with different scenarios for an immersive gameplay.

Hole Measuring Simulator : Windows

- Built a third-person system with Cinemachine and blend tree animations using Unity's New Input System for keyboard + mouse and PS5 gamepad support.
- Designed the terrain system and customized the environment to meet client needs. Implemented patrolling agents using Unity NavMesh.

## CERTIFICATIONS

- Game Development with Unity 2D Platformer (Udemy)
- Learn Math for Video Game Design (Udemy)
- Programming Design Patterns For Unity (Udemy)

## Unity Developer Intern

FEB 2023 - JULY 2023

- Gained hands-on experience developing AR applications with Vuforia, integrating immersive technologies to enhance user interactions.
- Gained hands-on experience building prototype apps using Firebase, Photon networking, and the OpenAI API.
- Learned Asset Bundles and Addressable and used them in a prototype game example.

## PERSONAL EXPERIENCE

### Pixel Journeys : WebGL

- 2D platformer game showcasing personal design and programming skills.
- Designed game levels independently, incorporating various interactable like enemies, coin collection mechanics, moving platforms, and puzzles.
- Automated WebGL builds using GitHub Actions (CI/CD)
- Game Link : <https://frosbyte.itch.io/pixel-journeys>

### Twsity Turns : Android

- Independently designed and implemented game levels featuring dynamic obstacles and rotating pathways.
- Published to Google Play, monetized with ads, and implemented player-competition leaderboards using the Firebase database.
- Game Link: <https://play.google.com/store/apps/details?id=com.FrosbyteArena.TwistyTurns>

### Dash Loop : Android

- Implemented gameplay mechanics, moving obstacles, and score-based progression.
- Utilized Unity Profiler to optimize performance across Android devices, ensuring smooth gameplay.
- Learned and applied the MVC design pattern to the existing UI logic, demonstrating initiative in adopting clean architecture principles.
- Game Link: <https://play.google.com/store/apps/details?id=com.FrosbyteArena.Dashloop>

### Learn with AR : Android

- Developed an AR app to explore various applications and possibilities of augmented reality.
- Showcases AR use cases and experiences with Vuforia & AR Foundation.
- Game Link : <https://frosbyte.itch.io/learn-ar>

## CONTACT

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