

SHARDUL D SHASTRI

Unity Developer | Gameplay Programmer | Game Developer
Pune, Maharashtra, India | +91 93262 32132 | shastrishar@gmail.com
[LinkedIn](#) | [GitHub](#)

PROFESSIONAL SUMMARY

Unity Developer with 1.5+ years of professional experience building and shipping cross-platform gameplay systems and interactive applications in C#. Owns client-side features end to end, spanning gameplay programming, UI implementation, real-time MIDI hardware integration, REST API integration, and dynamic content delivery through Unity Addressables and AWS S3, with production builds released to Android, iOS, WebGL, and Windows. Published researcher in game-theoretic machine learning with a computer science foundation.

TECHNICAL SKILLS

Engines & Languages: Unity (2D/3D), C#, .NET, Object-Oriented Programming (OOP), Python, JavaScript

Gameplay Programming: Gameplay Systems, Game Mechanics, Real-Time Input Handling, State Management, Level Progression Systems, Dynamic Difficulty Adjustment (DDA)

Unity Toolset: Addressables, Scene Management, Prefabs, uGUI / Canvas UI, Unity Profiler, Custom Save Systems, PlayerPrefs, MIDI Input Plugins

Backend & Data: REST API Integration, JSON Serialization, User Authentication, AWS S3, Azure ML, Local Data Persistence

Platforms & Builds: Android, iOS, WebGL, Windows, Cross-Platform Development, Multi-Platform Build Pipeline, Unity Cloud Build, Platform-Specific Graphics Settings

Engineering Practices: Debugging, Performance Profiling & Optimization, QA Testing, Git, GitHub, Version Control

WORK EXPERIENCE

Unity Developer — Furtados School of Music

June 2025 – Present

- Own end-to-end client-side development of Keys Are Fun, an interactive music-learning application built in Unity and C#, delivering features from architecture through release across four platforms.
- Engineered real-time MIDI hardware integration with custom Unity plugins to capture, parse, and map live keyboard input into in-game note events, powering the app's core interactive gameplay loop.
- Architected dynamic scene loading and remote asset streaming with Unity Addressables backed by AWS S3, decoupling content updates from app releases so new learning content ships without a store submission.
- Developed core learning mini-games and a native in-app PDF viewer and download system consistent across mobile, desktop, and WebGL.
- Delivered and maintained multi-platform builds for Android, iOS, WebGL, and Windows, configuring platform-specific graphics settings and responsive UI layouts to hold visual and performance parity across devices.
- Integrated REST APIs for user authentication and dynamic content management, and implemented local data persistence using PlayerPrefs and custom save and serialization scripts.

Unity Developer Intern — Wizphys AI Pvt. Ltd.

Dec 2024 – May 2025

- Built and optimized reusable, resolution-flexible UI components in Unity, improving visual consistency and usability across screen sizes.
- Profiled runtime performance with the Unity Profiler alongside senior engineers, diagnosing and resolving frame-drop bottlenecks.
- Executed systematic QA test passes, documenting and tracking client-side defects through to verified resolution.

PROJECTS

Adaptive Gaming: Cloud-Based Dynamic Difficulty Adjustment (DDA) | Technologies: Unity, C#, Azure ML, Python, Reinforcement Learning (SARSA), REST

- Built a proof-of-concept adaptive gameplay system that tunes difficulty in real time from live player-performance signals.
- Developed the Unity (C#) client and defined the client-to-service contract streaming gameplay telemetry to an Azure ML endpoint running a SARSA reinforcement learning model, applying returned parameters to game state at runtime.

Shell Reality Simulator: Gamified Learning Experience | Technologies: Unity, C#

- Designed and programmed an educational game teaching Linux terminal commands and operating system concepts.
- Engineered a command parser, player state tracking, and gated level progression that unlocks commands as players advance.

CipherSense: Adaptive Encryption System | Technologies: Python, Machine Learning, Cryptographic Libraries

- Implemented a machine learning utility that classifies input file structure (binary vs. text) to automatically select and execute the appropriate encryption algorithm.

PUBLICATIONS & ACHIEVEMENTS

- Published Research Paper: "Cognitive Impairment Diagnosis: A Game Theoretic Approach of Cognitive Machine Learning," Journal Press India.

EDUCATION

Bachelor of Computer Applications (BCA) — D.Y. Patil International University

2022 – 2025

Higher Secondary Education (HSC) — Ebenezer English High School

2021 – 2022