Aniruddha (Pri) Prithul

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Software Engineer with 8+ years of experience building real-time 3D, XR, and AI-powered applications in C++, C#, and JavaScript, specializing in performance optimization and cross-platform development.

EXPERIENCE

Autodesk | Software Development Engineer

Vancouver, Canada | Jun 2023 - Present

- Architected 3D systems for StoryArc, an AI-first previs application built with Babylon.js, React, and Node.js, including dynamically generated environments and virtual-character navigation.
- Designed an animation pipeline for skeletal avatars, supporting animation retargeting, baking to an internal representation, and timeline-based playback, scrubbing, and retiming.
- Designed an LLM-driven workflow that translates film scripts into verifiable formal action language for executable 3D scenes, improving reliability through iterative workflow design and hypothesis-driven evaluation.
- Architected an agentic interface using Vercel AI SDK and MCP servers to expose StoryArc capabilities and automate application workflows through AI agents.
- Architected ReFrame's runtime animation system in C#, enabling real-time recording, editing, playback, and BVH serialization on Meta Quest; optimized native-library interaction and rendering to improve standalone performance from ~20 FPS to 60 FPS.

Heavy Iron Studios | Gameplay Programmer (Intern)

Los Angeles, CA | Jun 2022 - Aug 2022

- Implemented gameplay, physics, UI, and reusable architecture systems for a web-based Unity title.
- Migrated and stabilized Jenkins CI/CD pipelines for console builds, including job configuration, build fixes, and validation.

University of Nevada, Reno | Graduate Research Assistant

Reno, NV | Jul 2018 - May 2023

- Developed Unity/C# VR systems for locomotion and interaction research, including software for controlled user studies, instrumentation, and data collection.

Mindfisher Games | Gameplay Programmer

Dhaka, Bangladesh | Jun 2017 - Apr 2018

- Led development of combat systems and AI in Unity for a mobile action title that reached 500K+ Google Play downloads.
- Built a post-launch asset-bundling pipeline and integrated Google Play Games Services for cloud saves.

PROJECTS

Iskabon: Developed and shipped a roguelite deckbuilder game in Godot

Brew-Game-Tools: A tiny C framework for making game-like-things quickly (easy setup, software renderer)

BrewEngine: Built a 2D game engine in C++/OpenGL with a custom rigid-body physics solver.

Commander Keen NX: Ported a classic game to Nintendo Switch using C, SDL2, and devkitPro/libnx.

EDUCATION

Ph.D., University of Nevada, Reno, Computer Science**,** Research Focus: Virtual Reality Locomotion (2023)

Bachelor's, Khulna University, Computer Science and Engineering (2017)

SKILLS

Languages: C++, C, C#, JavaScript, GDScript
Graphics / 3D: Unity, OpenGL, Babylon.js, Godot, SDL2, Emscripten
Web / AI: React, Node.js, LLM Agents, MCP, Tool Calling, Vercel AI SDK
Tools: RenderDoc, Jenkins, Git, CI/CD