

Alex Mollard

Software Engineer

Summary

Melbourne Vic
Australia

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github.com/AlexMollard

Game developer with 3 years at Big Ant Studios where I've worked mainly with C++, Lua, and C#.

I've picked up several other languages along the way too.

I'm passionate about creating quality software and always looking to improve my skills.

Check out my GitHub to see some of my projects and what I've been working on.

Experience

Big Ant Studios / Software Developer

April 2022 - PRESENT, Melbourne

- Worked on over 8 professional projects, some including AFL23, Cricket24, Tie Break, and Rugby 24.
- Contributed to the company's in-house engine by adding and maintaining various systems.
- Implemented entire UI systems that every screen in the game uses.
- Implemented and refactored game state flows.
- Revamped online systems using PlayFab and REST APIs.

Daily Tasks:

- Configure and set up projects for new game titles while maintaining existing codebases
- Collaborate with cross-functional teams (artists, designers) to implement new features and systems
- Develop and integrate online functionality and multiplayer systems using PlayFab and REST APIs
- Refactor and optimize legacy code within the custom Big Ant engine
- Create internal development tools to improve workflow efficiency and solve in-house requirements

Projects

MMO SERVER

A C++ MMO server using ENet

<https://github.com/AlexMollard/EnetPlayGround>

- An MMO-style game server using ENet for network communication.
- Focused on learning and improving network programming skills.
- Implementing mySQL database for user data storage and management.
- Implemented a basic game server with user authentication and data management.

SLIME PROJECT

A C++ Vulkan rendering engine

<https://github.com/Slime-Dev/SlimeProject>

- A personal playground for learning modern Vulkan and its 1.3 features.
- Focused on clean, understandable code and a growing graphics framework.
- Implemented various Vulkan features and optimizations.

AUDIO ENGINE

A C++ audio engine

<https://github.com/AlexMollard/Fly>

- A C++ audio engine using OpenAL.
- Focused on learning audio programming and sound design.
- Implemented 3D sound positioning and basic audio effects.
- Created a simple API for audio playback and manipulation.

COLOR GRADING LAB

OpenGL-based color grading tool

<https://github.com/AlexMollard/RenderAlchemy>

- Developed a colour grading laboratory using OpenGL.
- Implemented HDR rendering and CLUT wizardry.
- Created a user-friendly UI for real-time colour grading adjustments.
- Split screen comparison for before and after effects.

Education

ADVANCED DIPLOMA OF PROFESSIONAL GAME DEVELOPMENT

Academy of Interactive Entertainment (AIE) RTO 88021

January 2019 - December 2020

- Advanced Diploma of Professional Game Development
- Focused on computer games and programming skills
- Gained proficiency in C++ and C#
- Engaged in hands-on projects and collaborated with peers