

Alex Mollard

Software Engineer · Systems · Applications · Developer Tooling

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PROFILE

Software engineer delivering production systems, cross-platform networking and developer tools, with commercial contributions across eight shipped PC and console titles since 2022. Personal projects span Android applications, C++/C# tooling and agent-assisted development with automated verification.

PROFESSIONAL EXPERIENCE

Big Ant Studios 2022 - present
Current role: Senior Generalist Programmer

- Implemented Cricket 26's client-side WebSocket stack with cross-platform TLS handshake support and took the networking work through platform certification.
- Improved existing internal memory diagnostics; created Big Ant's crash-reporting system as sole programmer, including Windows Error Reporting capture and grouping.
- Migrated legacy Python automation to CSX and improved build chains and developer workflows.
- Delivered platform certification work across PC, PlayStation and Xbox; worked with producers to resolve release-critical issues during submission windows.
- Built and maintained the UI backend for every screen in AFL 23; implemented most of TIEBREAK's UI while maintaining its legacy widget framework.
- Ported gameplay systems between studio titles and stabilised integrations across the AFL, Rugby and Rugby League codebases.
- Creating a studio asset-management system as sole programmer, intended to replace existing workflows and provide end-to-end asset tracking.

Eight shipped titles: Cricket 22, AFL 23, Cricket 24, TIEBREAK, Rugby 25, AFL 26, Rugby League 26 and Cricket 26.

SELECTED PERSONAL PROJECTS

AetherCore - C++ / Vulkan engine and C# tooling

- Created and am sole programmer of AetherCore, a C++/Vulkan engine with editor recovery and C# hot reload. Its MCP interface lets agents inspect and control the live editor and receive structured test results.
- Direct agent-assisted development with Claude Code and Oh my PI across multiple AI providers: define architecture and acceptance criteria, review changes and verify with tests before integration. Also use AI development harnesses professionally at Big Ant since 2026.

Ironvillum - Android / Kotlin / Jetpack Compose

Created and am sole programmer of Ironvillum, an offline-first Android training app with Room storage, CSV imports and optional Supabase services. Direct and review agent implementation; define product rules and validation requirements, including emulator testing and schema checks.

TECHNICAL SKILLS

Languages	C++, C#, Rust, Python, GLSL/HLSL, PowerShell
Systems	WebSocket, TLS, ENet, NAT traversal, asset pipelines
Applications	C# editor tooling; Kotlin, Compose, Room and Supabase (personal projects)
Tooling	Crash diagnostics (WER), build automation, MCP, Claude Code, Oh my PI, Git
Platforms	PC, PlayStation, Xbox, Android (personal projects); Vulkan, OpenGL, GPU profiling

EDUCATION

Advanced Diploma of Professional Game Development - AIE Melbourne