

INTRO

My pitch as a software development contractor and consultant is that I can take a software application from idea to production with minimal resources in relatively short time and thus on a very tight budget.

In recent years my development work has involved a significant element of VR but anything with a high level of interactivity and perhaps an entertainment or learning element is familiar ground for me.

EXPERTISE SUMMARY

- Efficient remote or local project design, production and delivery
- Software development all-rounder with a practical, language-agnostic approach
- Can design new products or maintain, optimize and refactor existing code

VR WORK SUMMARY

My introduction to VR development was with the Oculus Rift, where I developed a simulator for the Chevy Tahoe that was featured at the 2015 Detroit Motor Show. This was a mixture of interactive and promotional components, and the action took place inside and outside the vehicle.

I've also developed interactive applications for the impressive zSpace Virtual Holography system, and published a prototype VR game. More recently I've been developing custom apps for a 360 video specialist, targeting Gear VR. This includes an interactive, customisable player and a VR Learning Management System.

These products were developed in Unity 3D, allowing multi-platform delivery, but I can work with several development environments and languages; whatever works best for the project.

FOCUS

Efficient and fast code for interactive multimedia products. Developing products with a strong visual and audio component. I work both solo and in teams (leading if required)

EXPERIENCE

- High performance mobile, desktop and embedded applications
- Multimedia authoring tools for education, games and CBT/LMS
- Technical documentation and presentations
- Technology evaluation
- Mobile apps & casual games
- 3D educational and promotional products
- Embedded coding on custom hardware

TOOLS, PLATFORMS, TECHNOLOGIES

- Windows, Macintosh, iOS, Android, embedded (PIC32, Arduino)
- ANSI C, C++, Objective-C, C#, Lua, Python
- OpenGL, OpenAL, Video, Sockets
- Visual Studio, Xcode, Unity 3D
- 3D, VR, AR, audio, communications

SELF-PUBLISHED SOFTWARE

[CubeMotion](#) - animated matching game (Unity 3D, *retired from app store*)

[Stroople](#) - 2D iPhone brain-training game (Corona 2D, Lua, iOS, Android, *retired, now on Github*)

[NoteTrainer](#) - wavelet-based pitch tracking app for iPhone (Objective-C, Xcode, iOS, *retired from app store*)

[Powerbullet Presenter](#) - Windows desktop application (Visual C++, ATL, COM, Win)

[Awakening](#) - Oculus Go game in development

PUBLISHED ARTICLES

Dr Dobbs Journal: [Cross-platform video development](#) (C, Quicktime, Mac/Windows)

Dr Dobbs Journal: [Cross-platform 3D graphics development](#) (C++, Apple RAVE 3D, Mac/Windows)

Dr Dobbs Journal: [Netscape plug-in development](#) (C++, Mac/Windows)

RECENT

Worked with small outsourcing agency [4D Pipeline](#). Developed for [Bunkspeed](#), [P3D](#), [zSpace](#), [Unity Technologies](#), [3DEXCITE](#). Work involved holographic 3D educational applications, photo-realistic rendering applications, interactive 3D product development tools, product simulations. CAD ray-tracing plug-ins and Oculus Rift VR. Developing products for [Panedia](#) ([360 video player](#), VR LMS - in development)

SOME PREVIOUS CLIENTS

Gold Coast 2016 - current
Panedia - Gear VR 360 Video apps
Symbol - Agent-based Modeling (research)

San Francisco 2013-2016
4D Pipeline - 3D products, C#, C++, Unity, zSpace, Oculus Rift

Gold Coast 2012
GNT Engineering - embedded software, industrial monitoring hardware (MPLAB-X, ANSI C, PIC32)

Canberra 2000
PricewaterhouseCoopers - web apps and reporting tools (Java, Oracle PL/SQL, Perl)

Sydney 1992-2000
Amicus - x-platform desktop web app (C++, Mac/Win/Linux)
Pulse Internet Marketing - web applications (Java, ColdFusion)
Brilliant Digital Entertainment - game production tools (C++, MFC, Win)
Open Access - UDP multimedia messaging system (ANSI C, Win NT, UDP Sockets)
Big Animated Digital - multimedia training tools (Macromedia Director, C, Mac, Win)
Applied Learning - multimedia CBT tools (Director, Authorware, Mac, Win)

PREVIOUS BUSINESS

Sydney CBD
Triple D Studios - Owner/operator Fairlight MFX-based digital audio post production studio

LINKS

[Home page](#) with further info

[Linkedin profile](#)