Neil Goodman

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C# / C++ / Unity 3D / Unreal Engine / WPF / WinForms / Perforce / Mercurial

A professional software developer with over twenty years of commercial experience within the games industry, and in using game engines for non-gaming applications.

Experience

Digimania **May 2002 – April 2017**

Lead Software Engineer, Voxelise *(Windows, macOS, C#, C++, Unity 3D)*

Voxelise is a 3D voxel editor that is designed to be easy and intuitive yet powerful, being the only voxel editor available with both frame-based animation and layers. I conceived the project, lead the design and development, and liaised with voxel artists in the community for feedback and testing.

- Product owner, designer, and lead developer.
- Complex but accessible user interface.

Lead Software Engineer, Minimaker *(Windows, macOS, C#, Unity 3D)*

Minimaker is an app for creating and posing characters for 3D printers. It allows customisation of a high quality, animated 3D character, fine manipulation of the limbs and interactive painting before exporting as a 3D printable file.

- Posing of rigged characters using constraints.
- Blending of multiple animations and user-specified poses.
- Simple, modern and clean user interface.

Senior Software Engineer, Muvizu *(Windows, C#, C++, Unreal, WPF, WinForms)*

Muvizu is an animation tool using the Unreal 3 game engine to allow inexperienced and hobbyist animators to easily make short 3D animated videos using supplied characters and props. A professional version called RenderDM was made for TV and film studios to integrate with and speed up their existing rendering pipelines.

- Initial architecture and integration of the Unreal 3 Engine.
- Heavily styled WinForms and WPF user interfaces.
- Cross-language API (UnrealScript, C++ and C#) to control and monitor Muvizu externally.
- Render farm application suite using WinForms, allowing videos to be produced using remote computers on the network.
- Established a version control system (Perforce) and continuous integration system (CruiseControl.NET) to generate daily builds for the QA department and manage the release process.

Runecraft **April 2000 – August 2001**

Programmer, Soldier of Fortune *(Dreamcast Console, C)*

Converted Soldier of Fortune, a PC game using the Quake II engine to the Dreamcast console. Ported the scripting system, inventory and weapons, and developed a new front-end menu. The original game relied heavily on C++ and the Standard Template Library which were unsuited to the Dreamcast, resulting in the entire game being ported to C.

Red Lemon Studios **October 1998 – April 2000**

Programmer, Take the Bullet *(Dreamcast Console, C)*

Designed and developed a bytecode-interpreted scripting language for controlling cut-scenes and interactive game entities. It was reused in several released titles including the PC game of the sci-fi TV series, Farscape.

Programmer, Braveheart *(PC, Windows, C++)*

Originally brought onto the project to assist with the AI of vehicles and foot soldiers, the role grew to include development of the OpenGL and Direct3D rendering systems.

Digital Animations **June 1997 – October 1998**

Lead Programmer, game prototypes *(PC, Windows, C++)*

Designed and built a modular game engine for prototypes of two entirely different games. This was a major challenge and involved developing physics, collision detection and handling, scripting and rendering modules.

Gremlin Interactive **August 1995 – June 1997**

Lead PC Programmer, Reloaded *(PC, DOS, C)*

Lead developer on the PC version. First experience of managing a junior programmer.

Programmer, Actua Soccer: OEM Edition *(PC, DOS, C)*

Jointly responsible for developing OEM versions of Actua Soccer for 3Dfx, ATI and S3's 3D accelerated graphics cards.

Education

University of Teesside **September 1991 – June 1995**

BSc (Hons) Software Engineering

Final year dissertation was to develop a game engine in the style of iD Software's Wolfenstein 3D for the Linux operating system, and a low-level VGA driver to support it.

Interests

As well as being a keen gamer, I play the guitar and until moving house in 2014, I ran a successful guitar teaching business in my spare time. I enjoy tinkering with home automation and "Internet of Things" technologies and prototyping game ideas on my Android and iOS devices using the Unity game engine.