Personal Information

Email	pseudonymz@gmail.com	Mobile	+44 776 556 3928
Nationality	British		

Education

- PhD in Theoretical Astrophysics from Manchester University.
- BA (Hons) in Physics, 2:1 with Exhibition, from Exeter College, Oxford University.

Work History

Samsung, March 2017 - August 2017	Contract work with the Samsung GameDev team, including optimization of The Talos Principle and Vainglory for mobile devices and work on Android Vulkan drivers.
GOG.com , June 2014 – August 2016	Freelance work on implementation of the embedded client for GOG Galaxy and integration with The Witcher 3.
Mavens of London , November 2013 – February 2014	Contract work on computer vision and database development for websites.
Lightning Fish , January 2010 - November 2011	Contract programming and algorithm development on computer vision systems for Get Fit With Mel B and Let's Dance With Mel B (PlayStation 3 and Xbox 360 versions) as well as miCoach (PC version).
Argon Electronics and Arqiva , May 2009 - September 2009	Contract programming and development of physics models for satellite data transmission and disaster training devices.
Razorworks, October 2007 – April 2008	Contract programmer on Ford Racing Off Road and Pipe Mania for the PlayStation 2, PSP and Nintendo Wii, including porting a complete 3D engine to the Wii.
Empire Interactive , November 2005 - July 2006	Contract programmer on Taito Legends 2 (the sequel to the arcade emulator Taito Legends) and the Double Dragon emulator for Microsoft Live Arcade on the Xbox 360.
Empire Interactive , June 2004 - September 2005	Contract programmer on Taito Legends (running images of old Taito arcade games under emulation on Xbox, PlayStation 2 and PC), concentrating on processor emulation.
Sick Puppies, May 2000 – pril 2004	Senior developer on Ghost Master (an adventure / strategy game hybrid for the PC), working on engine development, gameplay, AI, tools, user interfaces and special effects.

Special Projects , September 1997 – March 2000	3D engine (and later physics, AI, game and online) programmer on Ultimate Golf for the PC.
Rebellion, March 1994 – September 1997	Programming of low level DirectX code used for Aliens Versus Predator on the PC, lead programmer on Free Runner (an unreleased action adventure game for the Sega Saturn), lead programmer on Headhunter (an unreleased space exploration game for the PC).
	Postdoctoral fellow in Munich, Germany, funded by the Royal - Society to do research on theoretical models of "Stellar Winds Around Wolf-Rayet Stars" (the subject of my PhD thesis).

Relevant Skills

I am familiar with a number of computer languages and game industry APIs, including C / C++, Lex / YACC, C#, Python, OpenGL, Vulkan and DirectX, as well as programming methodologies such as object orientation, generic programming and design patterns. I have worked on various game targets, including the IBM PC (Windows 95 - Windows 10, DOS), Android phones, PlayStation 3, Nintendo Wii, Xbox 360, PSP, PlayStation 2, Xbox and Sega Saturn.

I have programmed many types of game software, including a complete 3D engine (and platform drivers / low level code for two other engines), special effects, low and high level AI systems, gameplay code, user interfaces, artist tools and converters, collision detection and rigid body physics, an internet multiplayer system based on a peer to peer architecture, the core of a dynamically recompiling binary translator for machine code, software segmentation and motion tracking for computer vision, code generators for DirectX proxies, and a script compiler implementing the C# language specification to run on an interpreted stack machine.

I have also written background and plot for several games, including **Free Runner**, **Headhunte**r and the **Ghost Master** mission pack.

Other Qualifications and Experience

I have a background in commercial writing, including creating technical documentation and university coursework, editing and writing for the *Bloomsbury Good Reading Guide to Science Fiction*, acting as a contributing editor for the third edition of John Clute and Peter Nicholls' *Encyclopedia of Science Fiction* (and contributing to its second edition), writing *Science Fiction Video Games* for Taylor & Francis, and writing, designing and publishing *Science Fiction Hobby Games: A First Survey*.

I have had short term jobs in scientific research working on detector tubes for cosmic rays (at the Oxford University Nuclear Physics Laboratory) and enhancing fluid flow through sample rock cores (at the British Gas London Research Centre). I am also a Fellow of the Royal Astronomical Society.

I have been a player and amateur designer of tabletop role playing games for many years, and a player of computer RPGs for almost as long.

Website

http://www.pseudonymz.com/homepage/Pseudonymz/