

Personal

Shane Christopher

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Nationality: Irish

Date of Birth: 1st May 1985

Work experience

Jan 2011 - Present **Double Negative**

Position: Research & Development Programmer

Responsibilities:

Researching and implementing the latest technology to aid artists in their work on large scale films. Worked on the in-house volumetric renderer developing a node editor for shader creation, this move from using a mega-shader allowed for greater artist control over the look.

Primary developer of a real-time viewer for volume files supporting both openvdb and our in-house volumetric format. This includes directional lighting of the volume from multiple light sources in real-time through the use of light mip-maps and background threading. This was designed as a library which was used by a standalone application and a plug-in for Maya.

I am currently working on a new lookdev description format and the accompanying library and tools, which allows the importing and exporting of looks to and from applications used within the studio. This also involves writing OpenGL shaders that emulate the look of our production renders in real-time.

May 2006 - Sept 2006 **American Power Conversion**

Position: Programmer

Responsibilities:

Started with bug-hunting and graphics work. Moved on to primary programmer on a VB.Net client-server upload tool to allow resellers to upload their sales figures to the companies databases.

Education

Sept 2009 - Sept 2010 **Trinity College Dublin**

Course Title: M.Sc. Interactive Entertainment Technology

Principal Subjects:

This course was aimed at game design and programming in C#, C++ and DirectX. Areas covered included Rendering, Physics, Animation and Augmented Reality.

My thesis "Integration of Ray-Tracing Methods into the Rasterisation Process" involved using a GPU based raytracer written in DirectX 9 as the shadow pass in a deferred rendering pipeline. This could be extended into using raytracing for any secondary rays at render time.

Sept 2008 - May 2009 **Galway-Mayo Institute of Technology**

Course Title: B.Sc. Software Development

Principal Subjects:

I attended the 4th and final year of this honours degree course graduating with a 1.1. This course primarily focused on teaching good programming practices as well as software engineering methods and team building. The primary languages used were C# and Java.

Sept 2003 - May 2006 **Dun Laoghaire Institute of Art, Design and Technology**

Course Title: B.Sc. Multimedia Programming

Principal Subjects:

This course covered a broad range of fields in computing including programming, graphics and software engineering. I passed the course with merit after receiving a distinction for my project on a graphical population simulator programmed in Java.

Personal skills

Computer skills and competences:

Programming:

- I am skilled in C++, C#, Java, dx9, dx11, gl4.0, HLSL, GLSL, Python
- My first programming experience was with QBASIC, since then I have enjoyed learning several different languages and programming techniques.
- My personal work has centred around developing on the PC and Xbox using C++, DirectX, C# and the XNA framework.
- I am skilled at writing clean, readable code for large scale APIs and applications.

I have experience with handling large applications with a team of contributors in both work, college and personal projects. I have also been involved in online collaborative mods for various game engines.

I have a good knowledge of computer hardware. I've built computers for myself, co-workers and friends and like to keep up to date with the latest in hardware.

One of the most important skills I have is the ability to pick up new languages or technologies quickly and intuitively, this has helped me a lot in academic, personal and professional work.

Organisational skills and competences:

I enjoy leading and being part of a team while also being willing to help others with their problems in any area. I bond quickly with others, attending and organising work and social events. I have good communication and presentation skills which I've found critical in the workplace.

Artistic skills and competences:

10+ years experience of 3D modelling in Blender and painting textures within Photoshop aimed at in-game model design and with resource limitations in mind.

Interests:

I have a strong interest in personal programming projects and I am currently working on an OpenGL 4 testbed to allow me to quickly test new shaders and ideas. I also have a side project using Unity 5 to procedurally generate a world with the goal of creating a game prototype using this world in the near future.

I've been climbing regularly for about two years, enjoying both bouldering and sport climbing.

References

Professional:

Oliver Harding – Senior Programmer R&D, Double Negative.

Phone: +44 (0)7412597553

Email: oh@dneg.com

Academic:

Michael Manzke - Thesis supervisor, Trinity College Dublin.

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John Dingliana - Course coordinator and physics lecturer, Trinity College Dublin.

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