
CHRIS STARK



Summary

Generalist Gameplay, Networking, and Pathing Programmer:

- 14 years experience with gameplay, networking, physics, animation, pathing, and tools programming
- 17 years professional experience with C++, experience using C# to build tools
- Multiple years experience with Unreal Engine 3, PhysX, FMod, NavPower, Perforce, DirectX 11, and RenderDoc
- Familiar with Recast, SDL, wxWidgets, HLSL, and FreeType
- Responsible for implementing networking and UI systems for unannounced project
- Over the last 4 years have written my own game engine at home for learning purposes

Game Credits

<u>Ship Year</u>	<u>Title</u>	<u>Platforms</u>
2017	Orcs Must Die! Unchained	PC
2013	Aliens: Colonial Marines	Xbox 360, PS3, PC
2012	Orcs Must Die! 2	PC
2011	Orcs Must Die!	PC, Xbox 360
2011	Age of Empires Online	PC
2009	Halo Wars	Xbox 360
2008	Brothers in Arms: Hell's Highway	Xbox 360, PS3, PC
2007	Medal of Honor: Airborne	Xbox 360, PS3, PC
2006	Sin Episodes	PC
2006	25 to Life	PS2

Professional Experience

Robot Entertainment (3/2009-5/2017)

Senior Programmer

- Orcs Must Die! Unchained - Responsible for minion AI and animation, pathfinding, physics, general gameplay, networking, lag compensation, network compression, trap system, Sabotage mode, and core gameplay.
- Orcs Must Die! 2 - Responsible for AI and pathfinding, tools, trap system, and core gameplay.
- Orcs Must Die! - Primary gameplay programmer. Responsible for minion AI and pathfinding, physics, Morpheme integration, NavPower integration, tools, and core gameplay.
- Age of Empires Online - Responsible for initial AI and UI work.

Ensemble Studios (8/2007-1/2009)

Programmer

- Halo Wars - Responsible for fixing out of sync issues, unit abilities, and general gameplay.
- Unannounced project - Tools development and general gameplay.

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Gearbox Software (3/2007-7/2007)

Engine Programmer

- Unannounced project - Wrote memory leak tracker on top of existing memory manager system.
- Aliens: Colonial Marines - Various gameplay and visual effects.

Ritual Entertainment (1/2004-3/2007)

Engine Programmer

- Unannounced Project - Implemented multithreading client/server networking system with reliable and unreliable UDP packet delivery, client side player movement prediction, and networked physics. Implemented event-driven UI system and editor.
- Brothers in Arms: Hell's Highway - Helped design and implement the auto-aim system.
- Medal of Honor: Airborne - Helped maintain, debug, and investigate performance issues on the PS3 port.
- Sin Episodes - AI implementation and general gameplay.
- 25 to Life - Online front-end UI, DNAS network authentication for the PS2.

Barking Lizards Technologies (8/2003-12/2003)

Programmer

- Unannounced project - Designed and implemented terrain system, Xbox coding.
- GameServe Wireless - Wrote multithreaded MFC-based testing program for cell phone game server, simulated multiple thousands of simultaneous connections.

Signalogic, Inc. (5/2000-8/2003)

Part-time Software Engineer

- SigC54xx Linux/Windows 2000 Driver - Designed and implemented Linux and Windows driver for in-house hardware. Wrote wxWidgets front-end application for use on Linux.
- Real-Time Composer - Coded MFC application for building DSP applications out of code blocks in a visual editor.

Education

Master of Science - Computer Science

University of Texas at Dallas, 2006

Bachelor of Science - Computer Science and Software Engineering

University of Texas at Dallas, 2003

Additional

Spoke at GDC 2017

"Predictable Projectiles" (AI and player prediction algorithms for linear and ballistic projectiles)

More information at <https://shellsphinx.github.io>