

Joseph C. Weinhoffer Jr.

Me@JoeWeinhoffer.com | www.JoeWeinhoffer.com

OBJECTIVE Create unique, high-quality, intuitive, and enjoyable gaming experiences utilizing my development and design background, comprehensive education, and technical skills augmented with diligence, passion, and initiative

TECHNICAL

	Most Skilled With	Proficient Using
Programming:	C#, C++, Python, Java, JavaScript, HTML, CSS, XML, JSON	C, Lua, SQL, JSP, MEL, MATLAB
Software:	Unity, Autodesk Maya, Microsoft Visual Studio, Microsoft Office Suite, Eclipse, MonoDevelop, SharePoint, TortoiseSVN, MongoDB, TFS	Adobe After Effects, Adobe Photoshop, Adobe Illustrator, Autodesk MotionBuilder, Mercurial, Perforce P4V, Oracle
Libraries:	OpenGL, Bootstrap, Pure, NodeJS, AngularJS	FLTK, Qt, GLUT, HighCharts, ActiveMQ

PROJECTS

	Contribution
Event Analyzer:	Lead developer of C# Unity system to replay vehicle events in 3D visualizations built from parsed data files. Includes menu system, dynamic HUD, playback controls, physics simulation, and file server asset storage
Test Portal:	UX, UI and backend code for command-wide project management website inside SharePoint using HTML, Javascript, and AngularJS. Includes specialized project pages, documents, tasks, and application framework
Raytracer:	UI with interactive controls for scene objects, camera, and lighting by upgrading my C++ college assignment
FavMount:	Lua API and XML UI for <i>World of Warcraft</i> add-on to select, save, and randomly use favorite riding mounts
Cooking Kinection:	Project manager, designer, and developer in team effort to create Unity game prototype using Kinect
Smoke Simulator:	Semi-Lagrangian smoke simulation system in C++ and OpenGL, later extended to include explosions

EMPLOYMENT

Computer Scientist, US Army Aberdeen Test Center, Aberdeen Proving Ground, MD July 2012 – Present

- Visualized data collected in Army vehicle and weapon tests by designing, programming, and maintaining 2D and 3D applications
- Led multiple development efforts for new projects to solve critical command needs under rapidly shifting priorities and schedules
- Ensured usability of Unity and web-based products by translating user requirements into functional tools with intuitive UIs
- Participated in weekly scrum meetings and worked in highly iterative sprint environments to quickly complete key features

Graphics Course Grader, University of Pennsylvania, Philadelphia, PA January – December 2011

- Reviewed and graded complex C++ programming assignments for introductory and advanced computer graphics courses
- Helped students complete sophisticated programming tasks such as a raytracer, volumetric renderer, keyframe animator, and 3D modeling tool by monitoring message boards, answering questions, and holding office hours

Software Engineering Intern, Electronic Arts Tiburon Studio, Orlando, FL May – August 2010

- Reconciled game error reports and telemetry log data by creating a data matching application and associated APIs
- Demanded comprehension of the game reporting pipeline and identification of the game teams' use cases and requirements
- Constructed an animated GUI using C#, along with Windows WPF and XBAP formats, as well as an XML file parser

Technology Summer Analyst, Goldman Sachs, New York, NY June – August 2009

- Planned, built, and enhanced a trade history search program, resulting in 1100% speed increase while using 25% of memory
- Wrote an API to generate user-specified SQL queries to a relational database, and designed C# GUI for interactive access
- Required mastery of the firm's proprietary scripting language and UI framework, as well as understanding the business model

Software Engineering Intern, Quadriserv, Inc., New York, NY June – August 2008

- Coded a generator to create organized packages of test files, used for rapid input of trades into a unique online exchange system
- Utilized the exchange API to write and execute programs that automatically perform complex marketplace functions

EDUCATION

University of Pennsylvania, School of Engineering and Applied Science, Philadelphia, PA

Master of Science in Engineering Computer Graphics and Game Technology GPA: 3.87 / 4.00 May 2012

Bachelor of Science in Engineering Major: Computer Science GPA: 3.69 / 4.00 May 2011

Minors: Mathematics, Classical Studies *Magna Cum Laude*

AWARDS AND HONORS

US Department of Defense SMART Scholarship April 2010 – July 2014

US Army Achievement Medal for Civilian Service July 2011

Boy Scouts of America Eagle Scout May 2005

INTERESTS AND ACTIVITIES

Community Theater (*Spamalot, Hairspray, The Rocky Horror Show, Honk!*), Games, Squash, Guitar, Alumni Interviews, Reading