Guilherme Lampert

Curriculum Vitae

Education

2009–2015 Digital Games Development, Unisinos, Brazil.

This is a Computer Science degree focusing on Software Development for Games and Computer Graphics. Unlike CS, this is a much more specific course with a lot of practical assignments and projects.

2012–2013 **Computer Science and Mathematics**, *The University of West-ern Australia (UWA)*, Australia.

From 2012 to 2013, I had the opportunity of participating in a one year Study Abroad scholarship program at UWA. The scholarship was sponsored by the Brazilian Government as part of the *Science Without Borders* education program.

Experience

Academic

2014 Research, Unisinos, Brazil.

Researched and implemented real-time *Virtual Texturing* techniques on the iOS mobile platform. Tools involved: C++, Objective-C, OpenGL-ES, Grand Central Dispatch, SDL and XCode.

Professional

2011 Programming Internship, Sysnec, Porto Alegre, Brazil.
Web development and Data-Bases. Tools involved: VB.Net, JavaScript, GoogleMaps API, HTML and SQL.

2012 **Generalist Programmer**, Tools And Technologies (T&T), Porto Alegre, Brazil.

Worked full-time as a generalist programmer in a team developing embedded software for ATMs and banking hardware. Tools involved: C, C++, BatchScript, JavaScript, Windows API and Virtual Studio.

2013-Present Freelancer Programmer, Several Employers, Brazil.

In the latter years I have worked as freelancer on different programming contracts involving mainly banking and business software for payment, *SmartCards* and spreadsheet applications.

Languages

Portuguese Native

English Fluent

French Beginner

Computer and Programming Skills

Programming languages

- o C and C++ (adept with 6+ years of experience in the major standards (C99, C++98/03/11/14)).
- JavaScript, Lua, D (average); Objective-C, Rust (beginner);
 VB.Net, Java, C# (beginner); Assembly-language (average).

Graphics libraries

- OpenGL, WebGL, OpenGL-ES, GLFW (adept); OpenGL Shading Language GLSL (adept).
- o Direct3D (beginner); HLSL, Cg (beginner).

Other libraries and frameworks

- Windows API, Cocoa, SDL, SFML, Qt and Unity3D (average).
- o STL, Boost, POSIX API (average).

Programming tools

- o Vi/Vim (adept); Visual Studio IDE, XCode (average).
- o Command-line/shell, Make, CMake, Premake (average).
- SVN, Git (average).
- o Flex, Bison (beginner).
- o GCC-family compilers, Clang compiler (adept).

Math and Physics

- Algebra and 3D Linear Math (average).
- Rigid Body physics and simulation (beginner).

Other tools

- Blender3D, Autodesk Maya (beginner).
- o Gimp image editor, Pixelmator image editor (beginner).
- LibreOffice suite (average); MS Office suite (beginner).

About Me

I have been programming with the C and C++ languages, both in a professional and hobbyist basis, for more than six years, thus I consider myself to be a well experienced programmer. Gaming was always a passion for me, so in 2009 I started taking a University course on Game Development to follow games as a

career. Currently, I'm seeking for a first job in the games industry as a programmer. Even though I have never worked professionally with game programming, I have previous work experience with professional software development and I believe to possess a solid understanding about software development for games.

Graphics and real-time rendering for games are my primary areas of interest, which lead me to acquire in-depth knowledge of graphics APIs such as OpenGL and its variants (WebGL, OpenGL-ES, GLSL). I have experimented with Microsoft's Direct3D in the past, with versions 9 and 10, though I have not kept up with the latest versions. Graphics is not my only interest, I also enjoy working with low-level systems and platform specific code. I have great interest in the inner workings of Game Engines and libraries, as well as in optimizing code.

Code review and code quality are also subjects of interest. I am an active user of the $\underline{\text{CodeReview.SE}}$ community and currently figuring between the top five users in the site for the C and C++ tags.

I find it very important to be always up-to-date with the latest technologies and tools that arise in the world of computing, so I try to experiment whenever possible with different programming languages, tools and frameworks. I also place a lot of importance in code clarity and architecture, trying to always follow the best programming practices and patterns. My main goal as a programmer is to, ultimately, write code that is well designed and implemented, in a way that it will be easy to use and maintain and will be useful and functional for as long as it needs to be.

Portfolio Projects

Please visit my <u>portfolio page</u> for a full and detailed list of personal projects relating to games and graphics.

An always up-to-date copy of this Curriculum can also be found at glampert.com/curriculum.

Other Interests

- Reverse engineering.
- o Programming languages and compiler design.
- Science and Reason.
- Space exploration and Science Fiction.
- Miniatures and scale-models.