

FRANCOIS COULOMBE

Software Engineer & Fulltime Adventurer

WORK EXPERIENCE - 15 YEARS

Framestore Montreal	Software Engineer Being part of a team specialized in Location Based Virtual Reality working with Unreal Engine 4 using both Blueprint, C++ and C#. <ul style="list-style-type: none">➤ Developed new features and resolved multiple issues in the Virtual Production pipeline.➤ Developed different gameplay mechanisms using for Location Based VR project.➤ Profile and Optimized performances using RenderDoc.
CAE Montreal	Software Engineer R&D for the in house C++ OpenGL engine used within the CAE 7000XR flight simulator designed for commercial and military pilot training. <ul style="list-style-type: none">➤ Reducing the latency of in house AR/VR HMD by 16ms using a Timewarp/Reprojection algorithm.➤ Simulating the dust for desert helicopter training by developing a GPU particle system that is synchronized across up to 20 rendering nodes.
Emergent VR San Francisco	Software Engineer Helped this startup get funded for 2.2 millions and played a major role in the engineering of their Emergent software for the Oculus Gear VR. <ul style="list-style-type: none">➤ Optimizing the image stabilization pipeline from 1 hour to 2 minutes by moving different computer vision algorithms to the GPU using OpenGL shaders.➤ Working on in house OpenCV Panorama stitching algorithm.
Google Buenos Aires	Technical Leader Started a new development team in Buenos Aires. We grew from 3 to 16 people over 1.5 year and took over 7 projects (C++/C#/Java/Python) that impacted millions of users. <ul style="list-style-type: none">➤ Organizing/Planning the work for the different releases using their internal tracking software.➤ Reducing the cost of support for the line of products used to synchronize Microsoft Office with Google Apps by fixing several critical issues.
Dreamworks Los Angeles	Software Engineer Contributed to Academy Award winning animation software Premo used in the movies: Kung Fu Panda 2, Puss in Boots, Madagascar 3, etc. <ul style="list-style-type: none">➤ Architecturing a C++ SDK for in house Rigging Software.➤ Improving their SCons build system with optimizations on speed by up to 40% and binary size by 10000%.
Lucasfilm Singapore	Software Engineer Core programmer for an engine that powered four Nintendo DS titles. (Star Wars: The Force Unleashed 2, Jedi Alliance and Republic Heroes). I helped with the shipping of The Secret of Monkey Island 1 & 2: SE. <ul style="list-style-type: none">➤ A Rendering pipeline for Nintendo DS, iPhone and Windows.➤ A Maya asset pipeline using MEL and C++ SDK.➤ A silhouette normal mapping algorithm and a water shader for the Xbox 360.

EDUCATION

QANTM Australia 2005	Bachelor's Degree of Interactive Entertainment. Games Programming Major Internship at Auran games which turned into my first job at a games company.
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CREDENTIALS

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LANGUAGES

- French
- English
- Spanish
- C++, C#, Java, Python, Lua, etc

INTERESTS

- AR/VR
- Snowboarding
- Trekking
- Traveling