

FRANCOIS COULOMBE

Software Engineer & Fulltime Adventurer



WORK EXPERIENCE - 15 YEARS

Framestore Montreal 09/2019-Current	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.
CAE Montreal 03/2017-09/2019	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 09/2015-09/2016	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 02/2014-09/2015	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 01/2011-01/2012	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
Lucasfilm Singapore 01/2007-05/2010	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 & Asset pipeline for Nintendo DS, iPhone and Windows.➤ A silhouette normal mapping algorithm and a water shader for the Xbox 360.

EDUCATION

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

CREDENTIALS

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LANGUAGES

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

INTERESTS

- AR/VR
- Snowboarding
- Trekking
- Traveling