3d & 2d computer graphics
computational geometry
low-level optimization
virtual & augmented reality

anis benyoub {

paris, france,
 (+33) 6 52 78 80 94,
 benyoub.anis@gmail.com,
 http://anisb.github.io/index.html,
 https://github.com/anisb}

professional experience

Software Engineer - M&E Autodesk ▲AUTODESK
since 2017

○ **Stingray core**: game-engine optimization (low-level), AR & VR,
platform support, **occlusion culling** middleware [R&D/C++]

2015-2017
○ **Autodesk LIVE**: computional geometry, code optimization,
procedural generation, **rendering**, navigation; [R&D/C++/Max SDK]

Research project   2014-2015
Developing an **importance sampling** methodology for this **BSSRDF**
model with **Dr. Toshiya Hachisuka, Dr. Derek Nowrouzezahrai** and
Dr. Jeppe Frisvald [C++/OpenCL/OpenMP/MPI]

Storytelling and visualization - **M.Sc thesis**   2013-2015
Methodology to automate the script and the camera movements
for huge scientific simulations [OpenGL/CUDA/C++]

Teacher assistant - Polytechnique Montréal - 1 year   2014
 Classes of 50 students on **computer graphics**

AI developer - Eugen Systems - 4 Months   2013
○ Developing the game engine (real time strategy) [C++/Python]
○ Working on gameplay features for AAA games
 [Wargame AirLand Battle, Wargame Red Dragon, Act of Agression]

c++ developer - CNRS (Lyon, France)- 3 Months   2012
Development of a templated interactive scene viewer
based on a **3d rendering engine** [C++/ogre3d/python]
 https://github.com/DGtal-team/DGtal

lua ruby C
C# python
cuda
C++ glsl

languages {

 english: fluent,
 french: native,
 arabic: native,
 italian: read/written
 japanese: beginner}

developer experience:

platforms {   **tools {**
 linux,   git,
 windows,   cmake,
 osx,   visual studio,
 android,   xcode,
 webgl/asm.js,   doxygen}
 ios}

other {   **rendering {**
 ogre3d,   opengl,
 love2d,   opencl,
 maxsdk,   cuda,
 boost,   vulkan}
 openmp}

education

	2009		2013	2015
high school	**INSA Lyon** **M. Eng**		**Polytechnique Mtl** **M.Sc A**	
math engineer sci.	**Sci. background**	Computer science	Computer graphics	
	1st & 2nd years	3rd & 4th years	2 years	

Technical background
Project managment
Software engineering

Advanced computer graphics (A*)
Virtual reality (A)
Geometry modelisation and viz(A*)
Parallel computation (A)
Subjects in computer graphics (A*)
Rendering (A*)

community work {
 tedxinsa, // ideas worth spreading
 jv@insa, // gamejams, conferences
 etic} // junior enterprise

hobbies {
 open-source, piano, photography,
 rugby, video-making, video-games}

personal projects

○ **donut**: real-time rendering engine 🍩
[opengl, vulkan, multi-thread, dcc-tools]

○ **field**: design and develop an independent
network-based cooperative game involving
video game developement team.
[love2d, lua, GLSL]

○ **stickman**: design and develop a 3D, network
multiplayer first person shooter
[c++, python, ogre3D, sfml, bullet, blender]

○ **walk-around**: offline rendering engine
(PT, BPT, PM, PSSMLT, AO, etc.)
for various mediums (BSDF, BSSRDF).

○ **freebird**: airplane simulator in VR
for the CAVE.
[osg, VR, c++]

○ Creating several games during **game
jams** {~12 games) [Lua Java Python].