

## Jérôme ESNAULT

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<http://jesnault.fr/website/>

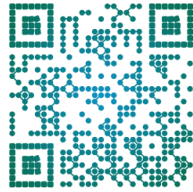
29 years old - civil partner

Driving license

[fr.linkedin.com/in/jesnault](https://fr.linkedin.com/in/jesnault)

<http://fr.viadeo.com/fr/profile/jerome.esnault4>

<https://twitter.com/jesnault06>



## ACTIVITIES

Hobbies : Photos / videos editing (assembly)  
Video games (FPS, adventures, strategy)  
hardware / software assistance repairs  
Reading / technology watch :  
IT, management, psychology

Sports : Judo, Chanbara, Tennis  
foot (occasional), squash (currently)

Langages : **English** read / written fluently and spoken  
(collaboration with different Anglo-French,  
German-French , Italian-French teams)

## R&D tech lead engineers in Virtual Reality software and 3D applications

### EXPERIENCES

Since 01/14



**Engineers R&D in Virtual Reality** as *Technical leader at INRIA – CDD – Sophia Antipolis (06)*  
Transfert/Improve research results in 'Images/Videos Based Rendering' to **Unity3D engine** in the  
European **Capture Reconstruct-PLAY** project.

**Inria REVES (REndering & Virtual Environments with Sound). Now named GRAPHDECO**

- ↪ Research projects contribution (optimisations, multiplatform's compatibilities...)
- ↪ IBR\_Common C++ cross-platform framework creation (all stable research modules refactored here)
- ↪ Unity3D IBR plugins and components creation to ease the videogames pipeline productivity
- ↪ Referent linking scientific and industrial partners
- ↪ Participation in Steering CR-PLAY (meetings, reports & Feedback) project

**Methods:** Architecture & Design Pattern - Méthodes agiles SCRUM/XP

**Tools:** C++/C# - Unity 4.x & 5.x - CMake - GIT - Qt5 - Jenkins - MSVC [10-11] - Fedora 20 - SVN - shell - OpenGL 4.x / Shaders GLSL - Boost - CGAL

12/12⇒01/14

(1 year)



**Engineers R&D in 3D software applications** as *technical product leader*

**SPACEYES - CDI – Mouans Sartoux (06)**

Maintenance and evolution of the 3D GIS products (Viewer, builder, Server, SDK & web plugin)

- ↪ Definition and management of projects for the offshore team
- ↪ Customer training on our products (national/international) and participation to the technical support
- ↪ Commercial & marketing team support into the drafting and implementation of technical part

**Methods:** Architecture & Design Pattern – agile methods SCRUM

**Tools:** C++ - OpenSceneGraph – Qt3/Qt4 – QtCreator - CMake – MSVC [7-10] – Jenkins – GIT/CVS

12/10⇒12/12

(2 years)



**Engineers for studies and development for Virtual Reality applications** – CDD – Sophia Antipolis (06)

Integration of a 3D physical simulation framework on some virtual reality platforms

**Inria SED (Service d'Expérimentation et de Développement)**

- ↪ isiVR project contribution : make it easier the uses of virtual reality equipments
- ↪ SOFA project contribution : provide some components to build a simulation graph and simulate 2D/3D interactive an realistic physical phenomena scenes
- ↪ Creating SOFAVR, a SOFA extension and isiVR module (C++ **open source multiplatform's projects**) : porting SOFA in cubic immersive space and cadWall (with head/tool tracking and 3D interactions)
- ↪ Implementation of agile method (SCRUM based) in the development team
- ↪ CMakeTools project creation and contribution to make it easier to create and manage C++ projects

**Methods:** UML - Design Pattern – agile methods SCRUM/XP

**Tools:** C/C++ - OpenSceneGraph - OpenThread - OpenMPI – VRPN - TinyXML – Qt4 - QMake – CMake - GIT - SVN - IceScrum - QtCreator – MSVC10 – Fedora 15 - Jenkins - doxygen - shell

03⇒09/10

(6month)



### Internship for the end of the studies – Saclay (91)

Integration of a 3D engine for the improvement of an **Augmented Reality demonstrator**  
**CEA LIST (Laboratoire d'Intégration des Systèmes et des Technologies)**

- ☞ OgreViewer C++ project creation (library linked to 3D engine to data structures of the labs)
- ☞ Creation of an demonstrator of maintenance assistance in Augmented Reality

**Methods:** Conception UML - Design Pattern

**Tools:** C/C++ - **Ogre3D - Blender - CMake** - Mercurial - camera1394 – Boost – MSVC9

2006-2007



### Technicien learner in maintenance and renovation service (1 year)

☞ AFA77 (Ascenseur et Fermetures Automatique)

### Holidays temporary operator (summer 2006 and 2007)



☞ ALTIS (91) : Cleanin silicium sliced (for chips creation) in 3/8 schedule



☞ PETIT FORESTIER (77) : Maintenance agent and inspector of all returned refrigeration containers

## EDUCATIONS

09/07 ⇒ 09/10

(3years)



### Stodie pathways electrical engineering and computer science - Evry university (91)

Master's degree 1-2 options **Virtual/Augmented and management/quality** (grade B pass)

Education: images processing, OOP C++/JEE, 3D vision/modélisation...

☞ Project of the end of studies (6 month)

**IBISC LABORATORY (Informatique, Biologie Intégrative et Systèmes Complexes)**

**Creation of 3D interactive and multimodale virtual tour of the university with VIRTOOLS**

License L3 option Intelligent Systems (grade C pass)

Education: real time programmation (C programming), mathematics consolidation, automatism...

09/05 ⇒ 09/07

(2 years)



### Stodie pathways industrial maintenance - Sénart university (77) - (top of my year)

D.U.T 1-2 options maintenance methods and computing

Education: VBA programming, automatics, electronics, electrotechnics, hydraulics, thermics

Juin 05

**Bachelor of Science** - Brie Comte Robert School (77)

## SKILLS

### TECHNIQUES

Programming

App Prog Interfaces (API)

Development environnement

Operating System (OS)

Build systems

Source Code Management (SCM)

Project management

Documentation

Presentations/Slide-show

Assembly / images process

Utilities / others

### ENVIRONNEMENTS / OUTILS

**C/C++14/C# (with threading / design pattern)** - script shell and CMake

**STL – Qt4.x & 5.x** - OpenMPI - TinyXML – VRPN

Ogre3D - OpenSceneGraph - SOFA - OpenSG

**Visual C++ [7-13] - Unity3D 4.x & 5.x - QtCreator** - Virtools

Linux **Fedora/Ubuntu** – Windows **7/8/10**

**CMake (expert)** / CPack / CTest - Jenkins – Qmake

**GIT (expert)** - SVN - Mercurial (+ tortoise) - **Team Foundation Server**

**Team Foundation Server** - BugZilla – IceScrum - AgileFant – GanttProject - Jira

**Doxygen (confirmed)** - MediaWiki - PmWiki - WordPress

Microsoft Office Word / Excel / **PowerPoint (expert)**

**Adobe Premiere/After Effect** – matlab

**OpenSSH/Putty** – VMWarePlayer – Blender/3Ds Max

## LINKS & REFERENCES

**CR-Play / IBR\_Common:** [George.Drettakis@inria.fr](mailto:George.Drettakis@inria.fr) - 33 4 92 38 50 32

**isiVR / SOFAVR / SOFA :** [David.Rey@inria.fr](mailto:David.Rey@inria.fr) - [Jean-Christophe.Lombardo@inria.fr](mailto:Jean-Christophe.Lombardo@inria.fr) - 33 4 92 38 77 21

**OgreViewer :** [steve.bourgeois@cea.fr](mailto:steve.bourgeois@cea.fr) – [didier@iup.univ-evry.fr](mailto:didier@iup.univ-evry.fr)

**Virtual tour:** [christophe.domingues@ibisc.fr](mailto:christophe.domingues@ibisc.fr) - 01 69 47 06 18