



# Sylvain MELIN

Software developer  
31 years old

## CONTACT

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## MISC

English: fluent  
Driving license  
High mobility  
Familiar with agile methods

## PERSONNAL

Guitar  
Aeronautics  
Photography  
Road trips  
Cosmology

## PROFESSIONAL EXPERIENCE

### Alsim Simulateurs – Nantes



October 2012 – December 2019

Member of the software R&D team, I contributed to flight simulator software design in many ways. My main tasks were:

#### Image Generator developer

Design and implement a real time Earth rendering engine based on OpenGL featuring geodetic coordinates management, advanced terrain rendering, out-of-core rendering and data streaming algorithms, 3D airport sceneries, weather effects and image calibration tools.

#### Data manager

Design and exploit the internal tools dedicated to aeronautical, GIS data processing and procedural airport generation. Apply corrections requested by the customers or authorities and deploy the data on the simulator parc.

#### Infography manager

Manage a 3D airport production planning. Recruit and monitor the commercial and technical aspects of an external artists team. Optimise the workflow and develop external tools for the artist team.

### Armée de l'Air – Clermont Ferrand



April – June 2011

Design a Mirage 2000D procedure trainer POC for maintenance technicians training:

- Modelling and texturing of a Mirage 2000D
- Simulation of an inertial navigation system unit alignment procedure under Flight Simulator X

## EDUCATION

### University Institute of Technology in Puy-en-Velay Bachelor's degree in real-time 3D programming

2012 – 2013

Specialization year in real-time 3D rendering technologies

### University Institute of Technology in Puy-en-Velay Technology degree in digital imaging

2010 – 2012

General programming course applied to 3D and image processing.

## SKILLS

C++



GIS



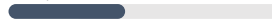
Shell scripting



OpenGL



SQL



Vulkan

