

Nicolas Silva

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www.github.com/nical/
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age: 22

Situation: Student

Mobility: international

Career plan

Software architect in creative projects

Education

2012

2007

...

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INSA Lyon
School of Engineering

Computer engineering
department

General scientific knowledge

During 5th year:
1 semester at the
Technical University of Denmark

During 2nd year:
all courses
in English

Scientific High School diploma, graduated with **Honours**

• [2006 - 2009] **Graphic arts** night classes at **Emile Cohl** Art school, Lyon, France

Languages

English: Fluent

- 2nd year: **all courses** in English.
- **2 months** in **Australia** (Exchange)
- **1 semester** in **Denmark** (Erasmus)

French: Native speaker

Spanish: Read, spoken, written

- **1 month** in **Argentina**

Skills

- Team work
- Software engineering
- Software quality
- Project management
- Agile development
- Software architecture and design
- Test-driven development
- GNU/Linux, Windows XP/7, VxWorks
- Object oriented programming
- UML
- Computer graphics
- Graphical user interface design
- Concurrent programming
- Network programming
- Realtime programming
- Working with large code bases

Tools

Visual Studio
Eclipse
Netbeans
Vim
gcc
GDB
Git
Perforce
Mercurial
SVN
CMake
Scons
Doxygen

Unity3d
Blender
Inkscape
Photoshop
Illustrator
The Gimp

Programming

C++ **C** **D**
Python **C#** **Lua** **Java**
LaTeX **JS** **Matlab**
HTML/CSS **Pascal** **SQL**

Qt **Boost** **Optix**
OpenGL **Cairo**
WebGL **CUDA**

Various Projects

- **Conception & development** of an open-source generic **node compositor** framework for **D** and **C++** → www.github.com/nical/kiwi
- A VST convolution reverb effect for **audio processing** softwares in **C++**
- A **raytracing** 3d renderer in **C++** with nvidia Optix
- A real-time **raymarching** demo using **OpenGL**
- A **radiosity** based renderer with **OpenGL**
- An **OpenGL** 3d renderer in C++
- A **WebGL** demo made in 24h → www.nical.github.com/webgl-flares
- • • Other projects at → www.github.com/nical/

Work experiences [internships]

(2011)

Game engine developer - Ubisoft Paris - 4 months

- Integration of online technologies into an Xbox360 game engine **[C++]**
 - Tool Developments **[C#]**
- Within a team of **100 persons**



(2010)

C++ developer - CNRS (Lyon, France) - 3 months

- Development of an optimized data structure for discrete geometry processing, based on Morton hash-tree **[C++]**
- Creation of plugins for a discrete geometry software (ParaView) **[C++]**
- Development of a plugin generator **[Python]**



(2008)

Worker - VG Goossens (Lyon, France) - 1 month

- Work in a packaging factory

Volunteering [at INSA Lyon]

(2010 - 2011)

- **Graphic artist** for the student union (Annual budget: 500 k€)
- **Organizer** of various campus events (Student introduction weekend, Ubuntu install party, IT recruitment forum...)

(2009 - 2010)

- **Graphic artist** for the student news paper *l'Insatiable*
- **Organizer** of The INSA Lyon Gala, decoration team (budget: 180 k€)

(2008 - 2009)

- **3d artist** for the student association INSA Game Creator

Interests & Activities

Music
Graphic Arts
Inspirations
Computers
Sport

Piano / Guitar /
Drawing / Painting / Infography /
Reading / Movies / Art /
Free Open-source software /
Ski / Snowboard / Swimming /

Referees

- David Coeurjolly:
- Christian Wolf:

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