# Simon Boyé

# 3D Sofware Engineer

#### Skills

#### Highlights

Image synthesis (real-time & offline), Geometric modeling, GPU programming

#### Computer languages

C/C++, GLSL, Python, Javascript, Java, C#, CUDA, HTML/CSS, SVG, XML, LaTeX, ...

Software libraries

OpenGL, Qt, Eigen, SDL2, CGAL, OpenMesh, libIGL

Languages

French (mother tongue), English (fluent)

Other skills

Game development, Image processing, Software architecture, OOP, Web development

### Experience

November 2015 – March 2018 (2,5 years)

## R&D Engineer – The Foundry [www.foundry.com]

CAD application development for the garment industry, based on *Modo* Design of a vector graphic system working on polygonal meshes

Work inside an international team

October 2014 - September 2015 (1 year)

**Software Engineer** – Inria, Manao team [http://manao.inria.fr/]

Design of a *finite elements* solver to compute *diffusion curves* based images Development of the *Vitelotte* module (vector graphics) in the *Patate* library [gitlab.inria.fr/patate/patate] Integration of *Patate* into *Gratin* (GPU image processing application) [gratin.gforge.inria.fr]

October 2009 - August 2013 (3 years + 1 year)

### PhD & ATER – University of Bordeaux

Sofware development: Unpublished prototypes (including a *Maya* plugin), *Meshlab* LS<sup>3</sup> plugin Publications: Siggraph Asia 2012, Pacific Graphics 2010 Teaching: Image synthesis, image processing, C++, network, object-oriented programing, ...

### Education

October 2009 – December 2012

### PhD in computer science, LaBRI, university of Bordeaux

"Hybrid representation for interactive geometric modeling" Design of a surface representation mixing *subdivision surfaces* and *MLS surfaces* Design of a *finite elements* solver to compute *diffusion curves* images

September 2006 - June 2009

## Master in computer science, university of Bordeaux, magna cum laude Specialties: Image sythesis and geometric modeling

Master thesis at LaBRI with Gaël Guennebaud: "MLS applied to polygonal meshes"

### Interests

Games

Development of my own game engine: **1** Lair [www.github.com/draklaw/lair] Game Jams (Ludum Dare) [www.draklia.net] Murder party organization and animation (~50 players)

#### Musique

Instruments : guitar, piano Founder and former president of the LaBRUIT (LaBRI's musicians association)