## Nicolas Douillet

R&D engineer
3D reconstruction, geometry
Image processing

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2017

Recommendations

## **WORK EXPERIENCE**

**2020 Mathworks**: algebraic geometry. Mesh processing and mesh generation toolboxes (in progress).

Hi! (start-up, smartphone application, Nice): extern consulting for technological project management and methodology.

**Youdome**, Monaco: expert engineer responsible for the software development. <u>Bodyscan and measures on 3D avatars.</u>

**Lycée Carnot**, Cannes : math teacher. A level, science section.

Mathworks: development for the Mathworks file exchange community. > 60 functions with doc, and 3k downloads.

Sculpteo: design, program and mesh of 3D printable mathematical surfaces. 3D printing project.

2013 - 2016 INRIA Sophia Antipolis: research and development engineer

Galaad team: surface fitting with NURBS. Surface fitting and curve fitting plugins.

**Titane** team: surface reconstruction with mesh. Optimization and integration of a high precision

meshing technique (scale space meshing). Photogrametry.

**2012** Cours Nicholas (Nice): self entrepreneurship: private tutoring in mathematics and physics.

2005 - 2006 INSA Lyon : Msc project. Echocardiographic images segmentation. Level sets, snake curves.

Engineer project. Dynamic imaging and tracking markers on videos, for the study of tyre physics.

## **EDUCATION**

2007 - 2011 CNRS-OCA. PhD: simulated data analysis for the space interferometer LISA. Modeling, inverse problem, parameter estimation, non convex optimization, signal processing. Award: best PhD poster.

2006 - 2007 INSA Lyon. Master of science. Image processing. Movement detection, tomography, inverse problem.

**2002 - 2006 CPE Lyon.** Engineer: image and signal processing, optimization, programming, algorithm.

College prep in superior mathematics (Math-Sup / Spé). Two years full-time higher education in science, languages and general studies, in preparation for competitive entry to Grande Ecoles (high-level schools of science).

## LANGUAGES

French Native speaker.

2000 - 2002

**English** Bilingual. First Certificate of Cambrige University.

German Working knowledge.