

Nicolas Douillet

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 [NicolasDouillet](#)

R&D engineer
3D reconstruction, geometry
Image processing



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WORK EXPERIENCE

- 2020** **Mathworks** : algebraic geometry. [Mesh processing toolbox](#).
Hi ! (start-up, smartphone application, Nice) : extern consulting for technological project management and methodology.
- 2019** **Youdome**, Monaco : expert engineer responsible for the software development. [Bodyscan and measures on 3D avatars](#).
- 2018** **Lycée Carnot**, Cannes : math teacher. A level, science section.
- 2017** **Mathworks** : development for the Mathworks file exchange community. > [60 functions with doc, and 2.7k 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.
- 2000 - 2002** **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.
- English** Bilingual. First Certificate of Cambridge University.
- German** Working knowledge.