

Nicolas Douillet

85 rue Henri Poincaré
06 410 BIOT
(+33) 698 248 769

 [/nicolas-douillet-a6793b142/](#)

 [NicolasDouillet](#)

R&D engineer
3D reconstruction, geometry
Image processing



✉ nicolas.douillet@free.fr

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 2.6k downloads](#).
Sculpteo : designs, programs and meshes of [3D printable mathematical surfaces](#).
- 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) : micro enterprise : private tutoring in mathematics and physics.
- 2005 - 2006** **INSA Lyon** : Msc project. [Echocardiographic images and videos 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 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** Fluent. First Certificate of Cambridge University.
- German** Working knowledge.