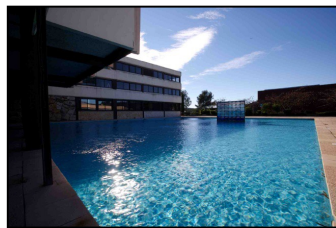


# MSc Internship at Inria Sophia Antipolis in Collaboration with GE Healthcare

[Inria](#) is the French Institute for Research in Computer Science and Mathematics. The MSc position is proposed in the [Asclepios research team](#) of the [INRIA Sophia Antipolis - Méditerranée](#) Research Centre, located on the French Riviera. This centre counts 500 people and about 30 research teams. The [Asclepios](#) research team addresses a wide range of research topics in Medical Image Analysis and Simulation. The team counts about 30 people.



[GE Healthcare](#) in Sophia Antipolis is a Global R&D centre for Ultrasound Medical Probes. The Engineering team has a recognized expertise in acoustic simulation and software design. Team creates state of art probes for GE Healthcare Ultrasound and for other Original Equipment Manufacturers (OEMs). This project will also be in collaboration with the University of Leuven (Jan d'Hooge).

## Research Topic

This internship aims at developing a digital simulator for cardiac ultrasound imaging, based on realistic anatomical data. Healthcare finality is personalization of ultrasound imaging systems for diagnosis improvement on difficult patients. It will be based on existing software for ultrasound simulation that will support the image simulation code to be developed, and will involve the analysis of the important factors for image quality in order to optimise it. GE lab will provide ultrasound arrays definitions and experimental data will be acquired within the GE lab in order to evaluate the simulations.

## Requirements

- Training in computer science or applied mathematics
- Good knowledge of scientific computing
- Interest for physics of waves (acoustic, optic...)
- Fluent in English (Reading, Writing, Speaking)
- C++, Matlab

## Practical Information

The MSc internship is for 6 months with a gross remuneration of 1445 Euros/month (net is about 1182 Euros). It could be followed by a PhD.

## Contact Information

Please send a CV, referees contacts and a motivation letter to:

[Maxime.Sermesant@inria.fr](mailto:Maxime.Sermesant@inria.fr) and [JeanFrancois.Gelly@ge.com](mailto:JeanFrancois.Gelly@ge.com)