2 Joint Median/Inria Internships: Imaging Phenomics using Deep Learning for
the Automatic Analysis of Liver Lesions in Medical Imaging Data

Since 2002, Median Technologies has been expanding the boundaries of the identification, interpretation, analysis and reporting of imaging data in the medical world. We are at the heart of innovative imaging software solutions for clinical drug development, diagnostic support, and patient care cancer screening, diagnosis and monitoring. Our customers are pharmaceutical and biotechnology companies, healthcare agencies and healthcare institutions around the world. Median is at the convergence of medicine, medical imaging and information technology. Based on the French Riviera with a subsidiary on the east coast of the USA, the company is growing as a very high rate in a fulfilling international and multicultural environment.

Inria is the French Institute for Research in Computer Science and Mathematics. The MSc position is proposed in collaboration with 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.

We offer 2 internships positions shared between Median Technologies and Inria. Depending on the candidate aspirations and skills, it could lead to either a permanent research position at Median Technologies or a PhD (CIFRE) supervised in collaboration between Inria and Median Technologies.

The internship will take place in the context of the development of Median Technologies iBiopsy® phenomics platform. This platform is designed to acquire, index, and analyze thousands of individual phenotypes and establish biological associations with high predictive accuracy with machine learning and deep learning methods. We are looking for interns to work on methods for the automatic analysis different pathologies using deep learning and statistical analysis. The interns will be highly encouraged to take initiatives, to propose and test innovative ideas.

Presentation of activities and main tasks linked to the job

- Position attached to the Science & Image Processing Research team of Median Technologies in collaboration with Inria Sophia-Antipolis, Asclepios team
- The intern will develop and test new machine learning methods

Sought profile

- MSc in computer science or applied mathematics
- Motivated by the artificial intelligence revolution
- Eager to work in the medical field, considered as one of the field where AI will have the largest impact
- Good Knowledge of Machine Learning and Statistical Analysis
- Familiar with standard Deep Learning architectures
- Good coding skills in Python
- Fluent in English (Reading, Writing, Speaking)
- High general scientific culture and research spirit
- Eager to learn and take initiatives

**Legal**
- Job location: Sophia-Antipolis, Nice Area, France
- Contract: 6 months internship
- Start: ASAP
- Offered salary: very competitive

**Why working with us?**
- Join Median an international, multicultural and fast-growing company
- Be at the heart of innovation
- Work with Inria, a leading public research institute

Send your resume, motivation letter, and grades obtained so far to estanislaoubel@mediantechnologies.com and xavier.pennec@inria.fr

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**Our Core Values**

- **Leading innovation with purpose**
  Combine the spirit of innovation with our passion and conviction to help cure cancer and other debilitating diseases.

- **Committing to quality in all we do**
  Be dedicated to quality in everything we do. Quality begins with us and we are committed to it.

- **Supporting our customers in achieving their goals**
  Listen to the needs of our customers and help make their goals our goals through our innovation, imaging expertise, superior services and quality solutions.

- **Putting the patient first**
  There is a person at the other end of the images we analyze who is counting on us to do everything we can to help make them healthier.