

Centre de Recherche en Imagerie Médicale

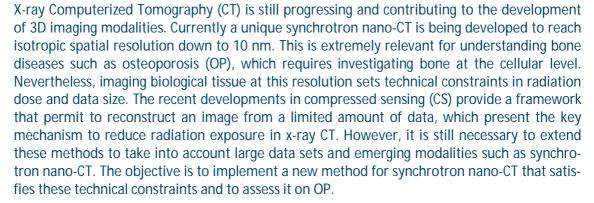
MASTER: Scalable image reconstruction methods for large data: application to synchrotron CT of biological samples

CREATIS opens a Master internship of 5-6 months to address new questions in the emerging field of Xray synchrotron imaging.

Context CREATIS is a research unit of CNRS/INSERM/INSA Lyon/University of Lyon devoted to medical imaging. Its different teams target various modalities (X-rays, Ultrasounds, MRI, PET and optics) and carry research from signal processing to medical applications. The candidate will join the Tomographic Imaging and Radiotherapy team, which has internationally recognized expertise in X-ray imaging and inverse problems.



Project





Keywords X-Ray Imaging, synchrotron radiation, tomography, inverse problem, regularization.

Work Plan The goal of the internship is to perform tomographic reconstructions from synchrotron lowdose data. In particular, a new method will be implemented to allow accurate reconstructions from a reduced number of projections. The successful candidate will address the following points:



Assess the feasibility of the proposed methods on low-dose synchrotron data for OP.



Salary Université de Lyon

About 550€ net monthly

Skills

The student must have a strong background in medical imaging and image processing. Knowledge in radiation physics would be appreciated but is not required. Programming skills: Matlab, C, C++.

How to apply?

Send your CV and academic records to

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