

24 months Postdoctoral research position opening (starting Feb/March 2017)
Multimodal navigation for laparoscopic surgery
TIMC-IMAG laboratory, CAMI team
www-timc.imag.fr/cami
Sandrine Voros

The Computer Assisted Medical Interventions (CAMI) team in the TIMC-IMAG laboratory (Grenoble, France) is seeking a highly motivated postdoctoral candidate with a strong background in Computer Vision, Image Processing and Software/Hardware Integration, with a focus on intra-operative multimodal imaging.

The Researcher will carry out multidisciplinary research around:

- the innovative fusion of multimodal data obtained by novel or classical sensors,
- the assistance to real-time decision-making through high-level planning and monitoring of the intervention related to the activities of the CAMI team.

He/she will work in collaboration with other French laboratories in the CAMI field within the CAMI Labex (<http://cami-labex.fr/>).

In this context, the researcher will be specifically in charge of designing and developing new systems for laparoscopic surgery, based on the fusion of endoscopic images and innovative per-operative modalities (e.g. but not exclusively Ultrasound, video...), possibly including robotic systems. He/she will collaborate closely with clinicians and may be implicated in pre-clinical evaluations and preparation of first clinical trials of the developed systems. She/he will be expected to publish her/his research in leading international journals and conferences in the field, participate in the supervision of PhD students and contribute to the collaborative projects within the Lab and the Labex CAMI.

This project will require a candidate with experience in:

- Computer vision (especially 3D reconstruction and camera calibration) and image analysis
- Image registration
- object-oriented C++ programming (with experience in QT, ITK/VTK, OpenCV, OpenGL)
- good command of English

A taste for rapid prototyping and electronics will be favourably considered.

The TIMC-IMAG laboratory is located minutes away from the Grenoble University Hospital, allowing for a close and effective collaboration with clinical partners. Grenoble is a welcoming student city at the heart of the French Alps.

For more information, please forward your CV, a sample of recent publications and two recommendation letters to:

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