

# Lab of Medical Imaging and Image Processing

## School of Biomedical Engineering

### • About the Lab •

Our lab was established by Prof. Tiange Zhuang in 1980s. Now the leader is Prof. Jun Zhao. There are two teachers and eleven students in our lab. We got a lot of funds from Ministry of Science and Technology (MOST) and National Natural and Science Foundation (NSFC) of China. We have Micro CT (Xradia XCT 200, USA) and image procession center (DELL).

### • About the Team •

Dr. Jun Zhao is a Professor and Associate Dean of SJTU School of BME. He is the Director of the Medical Imaging and Informatics Area of the school. He received his Ph.D. degree in BME from SJTU in 2006. He received over 10 research grants from various sources. He has published over 100 journal articles and conference papers, including the first paper on exact triple-source cone-beam CT, and the first paper on virtual eversion of colon. He has over 20 patents. His main research interests include: X-ray computed tomography; medical applications of synchrotron radiation; MRI and medical image processing.

Dr. Jian-Qi Sun is a Senior Engineer. He received his Ph.D. degree in Biomedical Engineering from SJTU in 2008. From 2012 to 2013, he worked as a postdoc visiting scholar in Paul Scherrer Institute, PSI (Switzerland). He has received funding from various sources. His current research focuses at synchrotron radiation-based medical imaging. Dr. Sun has been an awardee of the Second Prize of Natural Science Award from the Ministry of Education. He has published more than 20 papers.

### • Research Fields •

- Multi-source CT Systems and Methods;
- CT reconstruction and MRI reconstruction based on Compress Sensing
- Computer aide colon polyps detection
- Computer aide lung nodules detection
- Medical imaging and image processing based on synchrotron radiation

### • Responsibility •

- Understand the particularity of medical imaging
- Learn basic image processing methods
- Can segment the target tissue from the image

### • Eligibility •

- In principle, we recruit junior and senior students
- Hold at least a 2.5 GPA on a 4.0 scale
- Students of non-English speaking countries must provide English language proficiency certificate, IELTS no less than 6.0, and TOEFL no less than 90 points. If you are in the college for English teaching programs, please provide relevant certificates
- Have at least one prior research experience
- Experience in programming in MATLAB and/or C languages
- Give priority to whose department is Mathematics, Physics, EE, or BME

### • Additional Financial Support •

N/A

### • Contact •

Person in Charge: (Prof. Jun Zhao, +86-21-34204479, [junzhao@sjtu.edu.cn](mailto:junzhao@sjtu.edu.cn), Mon.-Fri. 8:00-17:00)

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