

## **ICIRA 2023 Special Session Proposal**

## Title of the Proposal: Medical imaging for biomedical robotics

## **Technical Outline of the Session and Topics:**

Recent advances in artificial intelligence, deep learning, digital image processing and medical imaging techniques present new opportunities for clinicians to build intelligent decision support tools. To automate the diagnostic process, increase the accuracy of disease detection and aid the patient's recovery, explore the disease cause and its treatment, it is necessary to discover the new knowledge of techniques. This special session is targeted for authors who wish to demonstrate medical imaging and novel biomedical robotics applications. We invite submission of high quality papers as related to the recent advances in medical imaging and biomedical robotics. Potential topics include, but are not limited to:

Topics of the Session:

- Medical imaging
- Machine learning and artificial intelligence
- Applications of medical imaging
- Biomedical robotics applications
- ...

## **Contact details of the Session Organizers**

- Organizer 1: Dongxu Gao, University of Portsmouth, dongxu.gao@port.ac.uk
- Organizer 2: Yingke Xu, Zhejiang University, yingkexu@zju.edu.cn
- Organizer 3: Yalin Zheng, University of Liverpool, yalin.zheng@liverpool.ac.uk