



## **2020 IEEE International Conference on Industrial Informatics** July 12-15, Guangzhou, China

# Special Session on "Deep Learning and the Applications in Medical Imaging Analysis (DLAMA)"

organized by

Principal Organizer: Yinghuan Shi, Nanjing University, China, <u>syh@nju.edu.cn</u> Organizer 1: Changqing Zhang, Tianjin University, China,<u>zhangchangqing@tju.edu.cn</u> Organizer 2: Luping Zhou, Sydney University, Australia, <u>luping.zhou.jane@gmail.com</u> Organizer 3: Daoqiang Zhang, Nanjing University of Aeronautics and Astronautics, China, <u>dqzhang@nuaa.edu.cn</u>

### **Call for Papers**

#### Theme:

Currently, deep learning is playing an essential role in the medical imaging field, including computerassisted diagnosis, image segmentation, image fusion, image-guided therapy, image annotation, and image database retrieval. With advances in medical imaging, new imaging modalities and methodologies, and new deep learning methods, come to the stage for medical imaging. Due to large inter-subject variations and complexities, it is generally difficult to derive analytic formulations or simple equations to represent objects such as lesions and anatomy in medical images. Therefore, tasks in medical imaging require learning from patient data for heuristics and prior knowledge, in order to facilitate the detection/diagnosis of abnormalities in medical images.

The main aim of this special session is to help advance scientific research within the broad field of deep learning in medical imaging. This special session focuses on major trends and challenges in this area, and presents works aimed to identify new cutting-edge techniques and their use in medical imaging. We hope it becomes an important platform for translating research from the bench to the bedside.

Topics of interest include, but are not limited to:

Deep Learning; machine learning and artificial intelligence; image segmentation, registration and fusion; image reconstruction and image quality; neuro imaging; microscopy and histology image analysis; computer aided diagnosis; population imaging and imaging genetics; applications of big data in imaging; integration of imaging with non-imaging biomarkers; visualisation in biomedical imaging; surgical data science.

**Submissions Procedure:** All the instructions for paper submission are included in the conference website https://indin2020.medmeeting.org/en

**Fast track to transactions:** INDIN 2020 presents a unique chance of fast-tracking best papers to IEEE Transactions on Industrial Informatics (TII). Authors intended to use the fast track shall submit papers in the form following the transactions requirements: length up to 8 pages, double-column IEEE format, <u>without</u> authors' names and affiliations. If the paper is accepted and recommended for the transactions' submission, the authors will be asked to:

- 1) Revise the paper according to the reviewers' comments and submit it to the TII with attached point by point summary of revisions. The paper will be then subject to double blind review process of TII.
  - A good quality paper may be considered for publication in IEEE Transactions on Industrial Informatics (I.F.=7.377) subjects to further rounds of review





2) Prepare a shortened, 4 page long version for the INDIN proceedings and submit it by the 'final manuscripts due' deadline of INDIN 2020. This version shall include authors names and affiliations as per the usual INDIN template.

#### **Deadlines:**

Deadline for submission of papers: Notification of acceptance of papers: Final manuscripts due: March 07, 2020 April 18, 2020 May 09, 2020