

Call For Papers

1st International Workshop on Patch-based Techniques in Medical Imaging (Patch-MI 2015)

In conjunction with MICCAI 2015, October 9, 2015, Munich, Germany

To submit a paper go to: <http://munsellb.people.cofc.edu/patchmi.html>

Introduction

Patch-based technique plays an increasing role in the medical imaging field, with various applications in image segmentation, image de-noising, image super-resolution, computer-aided diagnosis, image registration, and abnormality detection and image synthesis. As an intermediate level between global image and localized voxel, patch-based models offer an efficient and flexible way to represent very complex anatomies.

The main aim of this workshop is to help advance the scientific research within the broad field of patch-based processing in medical imaging. This workshop will focus on major trends and challenges in this area, and it presents work aimed to identify new cutting-edge techniques and their use in medical imaging. We hope the workshop to become a new platform for translating research from bench to bedside. We are looking for original, high-quality submissions on innovative research and development in the analysis of medical image data using patch-based technique.

Topics of interests

Machine learning methods with their applications to

- Image segmentation of anatomical structures or lesions
- Image enhancement
- Computer-aided prognostic and diagnostic
- Multi-modality fusion
- Mono and multi modal image synthesis
- Image retrieval
- Dynamic, functional physiologic and anatomic imaging
- Super-pixel/voxel in medical image analysis
- Sparse dictionary learning and sparse coding
- Analysis of 2D, 2D+t, 3D, 3D+t, 4D, and 4D+t data

Paper Submission

- Papers are limited to eight pages. Papers should be formatted in Springer LNCS style
- Patch-MI reviewing is double blind

Highlights

- Proceedings will be published in **Springer Lecture Notes in Computer Science** (LNCS) (EI, ISTP indexed) .
- The **Patch-MI 2015 Best Paper Award** will be presented to the best overall scientific paper.
- Accepted papers will be invited to submit to a special issue of a peer-reviewed journal.

Key Dates

- Paper Submission: **June 29, 2015**
- Notification of Acceptance: **Aug 07, 2015**
- Camera-ready Version: **Aug 21, 2015**
- Workshop: **Oct 9, 2015**

Workshop Organizers

- Pierrick Coupe
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- Guorong Wu
University of North Carolina, Chapel Hill, US
- Yiqiang Zhan
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