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Multimodal Brain Image Analysis

Second International Workshop, MBIA 2012
Held in Conjunction with MICCAI 2012
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Proceedings

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Preface

The 2nd international workshop on Multimodal Brain Image Analysis (MBIA) was held on October 1, 2012 in conjunction with the 15th international conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) at the Nice Acropolis Convention Center, Nice, France, with the objective of moving forward the state of the art in analysis methodologies, algorithms, software systems, validation approaches, benchmark datasets, neuroscience, and clinical applications.

Brain imaging technologies such as structural MRI, diffusion MRI, perfusion MRI, functional MRI, EEG, MEG, PET, SPECT, and CT are playing increasingly important roles in unraveling brain structural and functional patterns that give unprecedented insights into how the brain orchestrates an immense web of intricate functions. It is widely held that these imaging modalities provide distinctive yet complementary information that is critical to the understanding of the working dynamics of the brain. However, effective processing, fusion, analysis, and visualization of images from multiple sources are significantly more challenging, owing to the variation in imaging resolutions, spatial-temporal dynamics, and the fundamental biophysical mechanisms that determine the characteristics of the images. The MBIA workshop is a forum dedicated to the exchange of ideas, data, and software among researchers, with the goal of fostering the development of innovative technologies that will propel hypothesis testing and data-driven discovery in brain science.

This year the workshop received 23 submissions (including 7 invited papers). Based on the scores and recommendations provided by the Program Committee, which consists of 25 notable experts in the field, 19 papers were selected for poster presentations. Out of these 14 were selected for podium presentation.

We are enormously grateful to the authors for their high-quality submissions, the Program Committee for evaluating the papers, the presenters for their excellent presentations, and all who supported MBIA 2012 by attending the meeting.

July 2012

Pew-Thian Yap
Tianming Liu
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