Call for Papers

2nd International Workshop on Pattern Recognition in NeuroImaging (PRNI 2012)

July 2-4, 2012, London, UK

Multivariate and predictive analysis of neuroimaging data has gained ground very rapidly in the community over the past few years, leading to impressive results in cognitive, affective, and clinical neurosciences. Innovations in machine learning, such as mixed-norm regularisation, multiple kernel learning, and online learning have been incorporated swiftly, and novel methods are emerging which are specifically tuned to the constraints of neuroimaging data, prompting advances in areas such as structured sparsity or covariate modelling. Pattern recognition and machine learning conferences now typically feature a neuroimaging workshop, while neuroscience and brain imaging meetings dedicate sessions and track to "brain decoding" and multivariate predictive methods. Thus, a rich two-way flow has been established between disciplines.

After Istanbul (Workshop on Brain Decoding 2010) and Seoul (PRNI 2011), it is the intention of the 2nd International Workshop on Pattern Recognition in NeuroImaging to continue facilitating exchange of ideas between scientific communities, with a particular interest in the link between mass-univariate, post-hoc modelling and multivariate predictive models. The scientific programme will feature two tutorials, three keynote addresses, several contributed presentations of peer-reviewed papers, and a practitioner's workshop.

Several travel scholarships will be available for PhD students and post-docs based outside Europe, and will be awarded competitively based on reviewer scores of the papers.

Topics of Interest

PRNI welcomes original papers on multivariate predictive models of neuroimaging data, using e.g. fMRI, sMRI, EEG, MEG, ECoG modalities, including but not limited to the following topics:

Learning from neuroimaging data
- Online, incremental, and adaptive learning
- Modality combinations
- Optimisation and regularisation
- Graph-based techniques and graphical models

Interpretability of models and results
- High-dimensional data visualisation
- Multivariate and multiple hypothesis testing
- Links between brain structure and function
- Summarisation / presentation of inference results

Applications
- Disease diagnosis and prognosis
- Real-time fMRI
- Resting-state modelling
- Cognitive neurosciences

Submission Guidelines and Proceedings

Authors should prepare full papers with a maximum length of 4 pages (double-column, PDF) for review. Proceedings will be published by Conference Publishing Services (CPS) in electronic format. They will be submitted to the IEEEExplore and CS Digital Library online repositories, and submitted for indexing in IET INSPEC, EI Compendex (Elsevier), Thomson ISI, and others. Participants will receive a CDROM. The workshop website has all the details:

http://www.mlnl.cs.ucl.ac.uk/prni2012/

Important Dates and Deadlines

Paper submission deadline: 1st of April, 2012
Acceptance notification: 7th of May, 2012
Workshop: 2nd-4th of July, 2012

Program Committee