

CALL FOR PAPERS

ELMAR-2012 Special Session on Multimodal Biomedical Imaging Data Processing

Summary:

The need for quality understanding of processes in the area of biomedical science requires integration of different technological procedures for detecting dysfunctions in the organism. Individual results gained through MRI, PET scan, EEG, ultrasound or termography, represent the basis for creating a multimodal image. E.g., by combining multispectral, dynamic termography with ultrasound, we can significantly improve the procedure for detecting pathological changes in tissue. Images created in this way give far more information than each individual method realistically could. Data acquired through biomedical multimodal imaging requires advanced multimedia data processing in order to produce comprehensive information about basic biomedical occurrences. Computer methods for quality analysis of multimodal biomedical data represent a necessary step for entering the real-world of applications.

Topics:

- New ways of integrating existing complementary diagnostic systems
- Procedures for gathering data to form multimodal images
- Processing of multimodal images
- Multimedia processing of signals in biomedicine
- Ways of presenting the results of processing multimodal images in 3D
- Suggestions around combining medical diagnostic devices for generating multimodal images
- Approach for improving existing or finding new diagnostic methods based on multimodal biomedical data

Special Session Organizer:

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