



INVITED SESSION SUMMARY

Title of Session: <p style="text-align: center;">Task oriented graph and convolutional neural networks</p>
Name, Title and Affiliation of Chair: <p style="text-align: center;">Piotr S. Szczepaniak, MSc, PhD, DSc, Full Professor Institute of Information Technology, Lodz University of Technology, Lodz, Poland</p>
Details of Session (including aim and scope): <p>Theme, objectives and topics: The Session is dedicated to broadly understood issues of development of novel, tasks oriented architectures of graph and classic convolutional neural networks, an innovative use of them, methods of learning, as well as applications. There are no limits for the kind of data to be used, however numeric and images are preferred ones. This kind of approaches can be a powerful tools allowing to optimize parameters of well-designed mathematical formulas, whereas domain-knowledge can support automatic learning of models if the sets of available data are not sufficiently large. The tasks to be considered are: multiobjective optimization problems, image analysis and interpretation, clustering, detection, classification, diagnosis, treatment decisions, decision-making, automatic interpretation of results, etc. The session is an opportunity to identify new research directions and presentation of original research and application results. It is also an opportunity for exchanging and diffusing innovative and practical experience in this field.</p> <p>The scope of the Session includes, but is not limited to the following issues:</p> <ul style="list-style-type: none">• Task oriented architectures of graph and convolutional neural networks• Application for out-of-distribution (OOD) anomaly detection• Solving multiobjective problems• Intelligent data and image analysis, and automatic interpretation of results• Intelligent granular computing including superpixel-based image segmentation, object detection and classification• Medical applications
Main Contributing Researchers / Research Centres (tentative, if known at this stage):
Website URL of Call for Papers (if any):
Email & Contact Details: <p>piotr.szczepaniak@p.lodz.pl</p>

