AMT-BHI 2013 CONFERENCE October 29-31, 2013, Maebashi, Japan http://wi-consortium.org/conferences/amtbi13/

WORKSHOP ON GRANULAR KNOWLEDGE DISCOVERY IN BIOMEDICAL & ACTIVE-MEDIA ENVIRONMENTS

Important Dates:

- June 23 Paper submission deadline
- June 30 Paper acceptance notification
- July 21 Camera-ready paper submission

Granulation of information – inherent in human thinking and reasoning – becomes a new trend in data mining and processing. When a problem involves incomplete and vague information, it can be difficult to differentiate distinct elements, and so one can find it easier to group elements into granules. In the same way, when a problem involves massive amounts of data of heterogeneous nature and origin, it is quite often better to build the underlying models and systems on more specific granules representing a hierarchy and variety of aspects and components that the compound real-world phenomena consist of.

Benefits of granular approach to data mining and knowledge discovery can be seen especially clearly in computational tasks related to rich data and rich domain knowledge, where it is possible to discover a scheme of granules that represent data and interact with each other while modeling a given problem. The areas with particularly advantageous though, on the other hand, challenging mixture of data and knowledge include brain and health informatics where domain knowledge is based on at least partial understanding of biomedical processes and experience of medical specialists, as well as active media environments where huge amounts of data are generated according to specific soft/hard/middleware architectures. In all those scenarios, information granulation can help in faster and more robust data computations, as well as in discovering patterns and trends expressed by means of domain knowledge.

This session aims at continuing our research in granular knowledge discovery (see e.g. our special issue in <u>Intelligent Decision Technologies</u>) with the emphasis on foundations and applications related to the main topics of the <u>AMT 2013</u> and <u>BHI 2013</u> conferences. We are open for all contributions at the edge of information granulation, knowledge discovery, brain-health informatics and active media environments.

Session Organizers

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