

CALL FOR PAPERS - SPECIAL ISSUE OF

Archives of Control Sciences (ACS)

on

Granular Computing: Fundamentals and Algorithms

Guest Editors:

Granular Computing is concerned with processing of information at levels of abstraction that are more closely related to human information processing. The challenges that are faced by granular computing are focused on improvement of understanding of abstraction forming process, efficient derivation of such abstractions, metamodelling and qualitative reasoning. All of these are essential components of abstract reasoning that move information processing beyond the framework of phenomenological connections between the detailed models. In this sense, granular computing is well placed to integrate structural and behavioral system abstractions and to investigate homomorphisms between system modelling domains.

The goal of this special issue of ACS is to discuss the recent developments in this rapidly progressing research area, identify the most visible trends and study current and emerging applications. The special issue of ACS will help unify the existing methodologies and provide the reader with a comprehensive and fully updated state-of-the art view of the research pursuits.

Topics of interest include (but are not limited to)

- **Methodologies of information granules (interval analysis, fuzzy sets, rough sets, random sets, ...)**
- **Semantics of granular worlds**
- **Coping with complexity through information granulation**
- **Algorithms of information granulation**
- **Interoperability and communication issues of granular worlds**
- **System modelling with granular models**
- **Design of granular user interfaces**
- **Identification of granular models**

For the format of the submissions as well as a reviewing procedure, refer to the current guidelines of the journal www.ia.polsl.gliwice.pl/acs

The authors are encouraged to submit manuscripts *electronically* [pdf format] to both guest editors by **October 30, 2001**:

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