IEEE Transactions on Fuzzy Systems
Special Issue on
Advances in Type-2 Fuzzy Sets and Systems

I. Aim and Scope

Type-2 fuzzy sets and systems have emerged during the past decade as major areas within the general field of fuzzy sets and systems. This is because they are a natural next step in the progression of general research about fuzzy sets and systems and because many applications that use type-2 fuzzy sets have already demonstrated significant performance improvements over using type-1 fuzzy sets.

During the past decade most of the work that used type-2 fuzzy sets and systems focused on the simplest kinds of such sets and system, namely interval type-2 fuzzy sets (also known as interval-valued fuzzy sets) and interval type-2 fuzzy logic systems. Recently, however, important advances have been made in the theory of general type-2 fuzzy sets and systems. Type-2 fuzzy sets also are important for computing with words, because *words mean different things to different people* and such linguistic uncertainty can be modeled using type-2 fuzzy sets.

The aim of this special issue is to highlight the most significant recent developments—advances—on the topics of type-2 fuzzy sets and systems, to identify the most recent research directions, and to publicize this area to a wider audience.

II. Topics Covered

Authors are invited to submit their original and unpublished work in the areas including (but not limited to) the following (note that "type-2" includes interval type-2/interval-valued and general type-2):

❑ Theoretical studies of current type-2 paradigms and algorithms
❑ Developments of new type-2 paradigms and algorithms
❑ Convincing applications of type-2 fuzzy logic
❑ Type-2 fuzzy logic control
❑ Type-2 classification/clustering
❑ Type-2 for computing with words
❑ Quantitative comparisons of type-2 and type-1 fuzzy systems
❑ Type-2 uncertainty measures
❑ Optimization under type-2 constraints
❑ Optimization of Type-2 fuzzy systems
❑ Learning type-2 fuzzy systems
❑ Adaptive type-2 fuzzy systems

III. Important Dates

❑ April 30, 2012: Submission deadline
❑ July 31, 2012: Notification of the first-round review
❑ October15, 2012: Revised submission due
❑ January15, 2013: Final notice of acceptance/reject
❑ March 15, 2013: Final manuscript

IV. Submission

Manuscripts should be prepared according to the instructions of the "Information for Authors" section of the journal found at (http://ieee-cis.org/pubs/tfs/authors/) and submission should be done through the *IEEE TFS* journal website: http://mc.manuscriptcentral.com/tfs-ieee/ and clearly mark "Special Issue on Advances in Type-2 Fuzzy Sets and Systems" as comments to the Editor–in-Chief. All submitted manuscripts will be reviewed using the standard procedure that is followed for regular submissions.

V. Guest Editors

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