Call for Papers

A Special Issue on Applications of Fuzzy Systems in Data Science and Big Data
(Deadline for Submissions 1 March 2020)

1. Aims and Scope

In the era of big data, intelligent as well as fuzzy tools have become more important than ever. Extracting "intelligence" from a huge amount of data has allowed to support decisions in many fields, ranging from medicine to engineering. On the other hand, looking at big data from a fuzzy perspective allowed in a certain sense to start a new way of reasoning. Examples include interpretability of computing schemes, which have become more and more complex. Yet, successful applications of bio-mathematical modeling in a fuzzy environment have shown a good alternative to mere common black-box tools.

This special issue will be devoted to the current state-of-the-art research in the application of Fuzzy Systems regarding Data Science and Big Data Analytics. The guest editors solicit recent results mainly concerned with recent advances and challenges in the theory and applications of Fuzzy Systems in the fields of data sciences and big data environments.

2. Topics Covered

Authors are invited to submit their original and unpublished work with respect to tools and techniques, a special emphasis will be on:

- Novel fuzzy techniques to manage big data
- Applications of fuzzy techniques to large datasets gathered in (business intelligence, healthcare, and smart sensor networks)
- Scalability and performance of fuzzy systems on big data
- dynamic fuzzy machine learning (including fuzzy deep learning) used on big data

Main fuzzy system application areas include, but are not limited to: bioinformatics, business and finance, decision making, e-learning, e-administration, healthcare, security, sensors, automation, robotics, manufacturing, logistics, electrical and power engineering, telecommunication, and several engineering fields (e.g. environmental, electrical, civil). Only papers directly related to Fuzzy systems regarding data science and big data issues will be considered to adhere to the Aim and Scope of IEEE

Transactions on Fuzzy Systems available on the journal website here: https://ieeexplore.ieee.org/xpl/aboutJournal.jsp?punumber=91

3. Submission Guidelines

Ensure your paper is within the scope of this Special Issue. All authors should read 'Information for Authors' before submitting a manuscript at https://cis.ieee.org/publications/t-fuzzy-systems. Submissions should be through the IEEE TFS journal website http://mc.manuscriptcentral.com/tfs-ieee. Submissions should also be in the correct format https://cis.ieee.org/publications/t-fuzzy-systems/manuscript-format.

- It is essential that your manuscript is identified as a Special Issue contribution
- Ensure you choose 'Special Issue' as the type of paper when submitting
- A cover letter must be included which includes the title '**Applications of Fuzzy Systems in Data Science and Big Data**'
- We do not consider papers previously published in conference proceedings.

4. Important Dates

Submission deadline: <mark>1 March 2020</mark>
Publication (tentative): December 2020

5. Guest Editors

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