



2024 IEEE World Congress on Computational Intelligence

2024 IEEE International Conference on Fuzzy Systems

(<https://wcci2024.org/>)

Special Session on

Software for Soft Computing

(<https://sci2s.ugr.es/fuzzieee2024-ssc>)

Description of the session topic

The term Soft Computing is usually used in reference to a family of several preexisting techniques (Fuzzy Logic, Neuro-computing, Probabilistic Reasoning, Evolutionary Computation, etc.) able to work in a cooperative way, taking profit from the main advantages of each individual technique, in order to solve complex real-world problems for which other techniques are not well suited.

There are many software tools for Soft Computing. Most of these tools are available as open source software (see the webpage <http://sci2s.ugr.es/fss>). For example, regarding fuzzy modeling, [JFML](#) is the first library in the world that allows to develop fuzzy systems according to the new IEEE Std 1855 published and sponsored by the Standards Committee of the IEEE Computational Intelligence Society. There are stand-alone tools but also useful libraries in Java, Python, R, etc. Please, notice that these software tools are ready to play an important role in both industry and academia.

This session is supported by the IEEE-CIS FSTC Task Force on Fuzzy Systems Software and it is considered as one of the main planned activities of this TF in 2024.

Scope and topics

The aim of this session is to provide a forum to disseminate and discuss Software for Soft Computing, with special attention to Fuzzy Systems Software. We want to offer an opportunity for researchers to identify new promising research directions in this area. Topics of interest are:

- Data Preprocessing
- Data Mining and Evolutionary Knowledge Extraction
- Modeling, Control, and Optimization
- System Validation, Verification, and Exploratory Analysis
- Knowledge Extraction and Linguistic/Graphical Representation
- Visualization of results
- Languages for Soft Computing Software
- Interoperability and Standards
- Data Science, Big Data, and High-Performance Computing
- Trustworthy Artificial Intelligence
- Applications

Deadlines

- Paper submission: **January 15th, 2024**
- Acceptance/rejection notification: **March 15th, 2024**
- Camera-ready paper submission: **May 1st, 2024**
- Conference dates: **June 30th- July 5th, 2024**

Notes

Papers submitted for special sessions are to be peer-reviewed with the same criteria used for the rest of contributed papers. As a result, all accepted papers will be included in the proceedings of the FUZZ-IEEE 2024. If you are interested in taking part in this special session, please submit your paper directly through the [WCCI 2024](#) selecting the option "Main research topic": Special Session on Software for Soft Computing.

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