









WCCI FUZZ-IEEE CALL FOR PAPERS

IMPORTANT DATES

15 November 2023

Special Session & Workshop Proposals Deadline

15 December 2023

Competition & Tutorial Proposals Deadline

15 January 2024

Paper Submission Deadline

15 March 2024

Paper Acceptance Notification

1 May 2024

Final Paper Submission & Early Registration Deadline

30 June - 5 July 2024

IEEE WCCI 2024 Yokohama, Japan

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Fuzzy Machine Learning

FUZZ-IEEE 2024 The IEEE International Conference on Fuzzy Systems (FUZZ-IEEE) covers all topics in fuzzy systems from theory to real-world applications.

Special Session Abstract

The traditional machine learning models lack the ability to handle real-world uncertainty, provide interpretable models, and offer a robust mechanism to support dynamic environment. Fuzzy sets, fuzzy logic and fuzzy systems are well renowned for their capability to model uncertainty, enhance models' interpretability and offer an efficient and flexible way of representing data and navigating prediction models. Thus, the integration of machine learning and fuzzy techniques is prevailing and has gained great success in many areas. This special session aims to provide a forum for researchers to share the latest results in integrating fuzzy techniques and machine learning methods.

Topics of Interest

The main topics of this special session include, but are not limited to:

- \cdot Fuzzy technique-based feature selection and extraction
- · Fuzzy rule-based knowledge representation in machine learning
- · Fuzzy classification, fuzzy regression, and fuzzy clustering
- · Fuzzy transfer learning
- · Fuzzy concept drift
- · Fuzzy neural networks to modelling complex problems
- · Fuzzy support vector machine, fuzzy decision trees
- · Fuzzy modelling for handling uncertainties in machine learning models
- · Methods to improve models' interpretability using fuzzy techniques
- · Methods to enhance models' robustness using fuzzy techniques
- · Granular clustering, modelling and control
- \cdot Fuzzy techniques for aggregation, combination and information fusion in machine learning models
- · Fuzzy machine learning based decision support
- · Applications in transport, ICT, healthcare, business intelligence and more