



A Special Issue of the

International Journal of the Analytic Hierarchy Process

on

Decision Making Using Fuzzy AHP/ANP in Industry 4.0 Applications

CALL FOR PAPERS

Industry 4.0 is known as the fourth industrial revolution focusing on interconnectivity, automation, machine learning, and real-time data. Industry 4.0 requires expensive digital transformation investments, which must be based on reliable decision tools such as analytic hierarchy process or analytic network process. This special issue focuses on decision-making applications in digital transformation through intelligent and fuzzy systems. This special issue is on the theory and practice of fuzzy techniques for smart and innovative decision making methods. AHP and ANP may be a part of a methodology, which is composed of two or more methods such as AHP&TOPSIS or ANP&VIKOR. These methodologies should be used in Industry 4.0 related applications. Topics of interest include, but are not limited to, the followings:

Theoretical and/or practical integration of the followings with AHP and ANP for decision-making:

- Type-2 fuzzy sets,
- Hesitant fuzzy sets,
- Intuitionistic fuzzy sets,
- Spherical fuzzy sets,
- Picture fuzzy sets,
- Pythagorean fuzzy sets,
- Q-rung orthopair fuzzy sets,

- Neutrosophic sets,
- Fermatean fuzzy sets

and integration of fuzzy sets theory with the followings for smart and innovative solutions:

- Bayesian Networks
- Chaotic Systems
- Combinatorial Search
- Complex Systems
- Distributed Artificial Intelligence
- Embedded Systems
- Evolutionary Systems
- Genetic Algorithms
- Genetic Programming
- Machine Learning
- Neural Fuzzy Systems
- Neural Genetic Systems
- Neural network
- Pattern Recognition
- Qualitative Reasoning
- Reinforcement Learning
- Support Vector Machines
- Swarm Intelligence

Special Issue Important Dates

Deadline for Submission of papers: October 15, 2022

The end of the first round: December 15, 2022

The end of the second round: January 30, 2023

Deadline for the acceptance / rejection decisions: February 20, 2023

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