

Turkish Journal of Fuzzy Systems

An Official Journal of Turkish Fuzzy Systems Association: e-ISSN 1309-1190



An electronic, open access and refereed journal

<http://www1.gantep.edu.tr/~tjfs/>

Aims and Scope

Since its introduction to the research community by Lotfi Asker Zadeh, fuzzy theory has gained a big acceptance in both academia and industry. In today's world, it is easy to see many diverse applications of the fuzzy concept in science and industry. As everything improves, the fuzzy theory and its applications are also advancing to handle much more complicated problems of our lives. However, in many cases it is not easy to distinguish between problems that actually require a crisp or fuzzy approach in their modeling and solution. Indeed, the boundary between them is also uncertain. What types of problems really require modeling and solution through fuzzy logic? What are these problems and what is "fuzziness" in them? Without properly answering these fundamental questions, application of fuzzy sets and logic will probably not be very helpful in solving problems of our lives.

Turkish Journal of Fuzzy Systems (TJFS) will mainly focus on the determination of problems which can most suitably be handled through a fuzzy systems approach (i.e. fuzziness is their fundamental characteristics) and will provide a unique journal for publishing the recent research on applications, practices, and methodologies of fuzzy sets and systems. The authors must clarify why their problem needs a fuzzy modelling and/or solution approach in their work in order to be considered for TJFS.

Subject Coverage

Turkish Journal of Fuzzy Systems (TJFS) covers a broad range of topics related to fuzzy sets and systems including, but not limited to, the following (We should mention here that TJFS favors engineering and application oriented papers on the following topics):

- Approximate Reasoning
- Computing with Words
- Fuzziness and Probability
- Fuzziness and Statistics
- Fuzzy Algebra
- Fuzzy Algorithms

- Fuzzy Analytic Hierarchy Process
- Fuzzy Analysis
- Fuzzy and Chaos
- Fuzzy Automata
- Fuzzy Control
- Fuzzy Cognitive Mapping
- Fuzzy Data Analysis
- Fuzzy Data Mining
- Fuzzy Differential Equation
- Fuzzy Discrete Event Systems
- Fuzzy Expert Systems
- Fuzzy Forecasting
- Fuzzy Functions
- Fuzzy Genetic Algorithms
- Fuzzy Geometry
- Fuzzy Granular Computing
- Fuzzy Hardware and Architectures
- Fuzzy Human – Computer Interaction
- Fuzzy Image Processing
- Fuzzy Information Processing
- Fuzzy Information Theory
- Fuzzy Integrated Systems
- Fuzzy Intelligence
- Fuzzy Internet Computing
- Fuzzy Neural Networks
- Fuzzy Optimization
- Fuzzy Rough Sets
- Fuzzy Sets and Logic
- Fuzzy Signal Processing
- Fuzzy Simulation
- Fuzzy Speech Processing
- Fuzzy Stochastic Systems
- Fuzzy Systems Applications in Communications
- Fuzzy Systems Applications in Engineering
- Fuzzy Systems Applications in Environmental Issues
- Fuzzy Systems Applications in Finance Sector
- Fuzzy Systems Applications in Health Science
- Fuzzy Systems Applications in Management
- Fuzzy Systems Applications in Medical Sciences
- Fuzzy Systems Applications in Military Operations
- Fuzzy Systems Applications in Natural Sciences
- Fuzzy Systems Applications in Pattern Recognition
- Fuzzy Systems Applications in Power Systems
- Fuzzy Systems Applications in Public Services
- Fuzzy Systems Applications in Robotics and Mechatronics
- Fuzzy Systems Applications in Service Sciences
- Fuzzy Systems Applications in Social Sciences
- Fuzzy Systems in Industrial Engineering
- Fuzzy Systems in Operations Research
- Fuzzy Systems Interfaces with Metaheuristics
- Hybridization with Fuzzy Systems
- Mathematical Foundations of Fuzzy Logic
- Neuro – Fuzzy Systems
- Philosophy of Fuzzy Logic
- Software Development for Fuzzy Systems Applications
- Type-2 Fuzzy Logic Systems and Applications

Other topics and applications related to Fuzzy Logic and Fuzzy Systems.

Editorial Team

Honorary Editor

I. Burhan Turksen

Department of Industrial Engineering,
TOBB Economy and Technology University, Ankara, TURKEY

Editors

Adil Baykasoglu

Department of Industrial Engineering, University of Gaziantep,
27310 Gaziantep, TURKEY

Turkay Dereli

Department of Industrial Engineering, University of Gaziantep,
27310 Gaziantep, TURKEY

Editorial Board Members

Sansanee Auephanwiriyaikul

Department of Computer Engineering,
Chiang Mai University, Huay Kaew Rd, Chiang Mai, Muang 50200, THAILAND

Bingyuan Cao

230 Wai Huan Xi Road, Guangzhou Higher Education Mega Center,
Mathematics & Information Science School, Guangzhou University, 510006, CHINA

Thierry Denoeux

Universite de Technologie de Compiegne,
U.M.R. C.N.R.S. 6599 Heudiasyc, Centre de Recherches de Royallieu
B.P. 20529, F-60205 Compiegne Cedex, FRANCE

Gary (Gang) Feng

Mechatronic Engineering, Manufacturing Engineering and Engineering,
City University of Hong Kong, 83 Tat Chee Avenue,
Kowloon Tong, HONG KONG

Gulcin Buyukozkan Feyzioglu

Industrial Engineering Department, Galatasaray University,
Ciragan cad. No. 36 34357 Ortakoy, Istanbul, TURKEY

Candan Gokceoglu

Department of Geological Engineering,
Hacettepe University, Beytepe, Ankara, TURKEY

Angappa Gunasekaran

Department of Decision and Information Sciences,
Charlton College of Business, University of Massachusetts - Dartmouth
285 Old Westport Road, North Dartmouth, MA 02747-2300, USA

About Ella Hassanien

Cairo University, Faculty of Computers & Information,
Information Technology Department
5 Ahmed Zewal St., Orman, Giza, EGYPT

Kaoru Hirota

Dept. of Computational Intelligence and Systems Science,
Interdisciplinary Graduate School of Science and Engineering,
Tokyo Institute of Technology G3-49, 4259 Nagatsuta,
Midori-ku, Yokohama 226-8502, JAPAN

Robert John

Department of Informatics, De Montfort University,
The Gateway, Leicester LE1 9BH, UK

Cengiz Kahraman

Industrial Engineering Department, Istanbul Technical University,
34367 Macka, Istanbul, TURKEY

Janusz Kacprzyk

Systems Research Institute, Polish Academy of Sciences,
ul. Newelska 6, 01-447 Warsaw, POLAND

Gulser Koksai

Industrial Engineering Department,
Middle East Technical University, 06531 Ankara, TURKEY

Rudolf Kruse

Fakultät für Informatik, Otto-von-Guericke-Universität Magdeburg,
Universitätsplatz 2, D-39106 Magdeburg, GERMANY

Andrew Kusiak

Department of Mechanical and Industrial Engineering,
College of Engineering, The University of Iowa, Iowa City, Iowa, 52242, USA

Reza Langari

Texas A&M University, Department of Mechanical Engineering,
College Station, TX 77843-3123, USA

Mashallah Mashinchi

Faculty of Mathematics and Computer Sciences,
Shahid Bahonar University of Kerman (SBUK), Kerman, IRAN

Jerry M Mendel

University of Southern California, Electrical Engineering Department,
Signal and Image Processing Institute, 3740 McClintock Ave., Los Angeles, CA 90089-2564, USA

Vesa A. Niskanen

Department of Economics & Management, University of Helsinki,
PO Box 27, 00014 Helsinki, FINLAND

Farley Simon Nobre

Postgraduate Programme in Business Administration,
School of Management, Federal University of Parana, Jardim Botânico, Curitiba - PR, BRAZIL

Ercan Oztemel

Industrial Engineering Department, Marmara University,
Goztepe Kampusu, Kadikoy 34722, Istanbul, TURKEY

Witold Pedrycz

Department of Electrical & Computer Engineering,
University of Alberta, Edmonton, CANADA

Timothy J. Ross

Department of Civil Engineering, University of New Mexico
Centennial Engineering Center, Albuquerque, NM 87131, USA

Harun Taskin

Industrial Engineering Department, Sakarya University
54187, Sakarya, TURKEY

Paul P. Wang

Department of Electrical & Computer Engineering,
Pratt School of Engineering, Duke University, Durham ,NC, 27708, USA

Wei-Yen (Wayne) Wang

Department of Applied Electronics Technology,
National Taiwan Normal University, TAIWAN

Wen-June Wang

Department of Electrical Engineering,
National Central University, TAIWAN

TJFS Inaugural Issue

Volume 1, Issue 1 (2010)

G Ulutagay and EF Nasibov,

Influence of transitive closure complexity in FJP-based clustering algorithms

N Cagman, F Citak, S Enginoglu,

Fuzzy parameterized fuzzy soft set theory and its applications

M Namazov, O Basturk,

DC motor position control using fuzzy proportional-derivative controllers with different defuzzification methods

AY Yalciner, B Denizhan, H Taskin,

From deterministic world view to uncertainty and fuzzy logic: a critique of artificial intelligence and classical logic