

2022 9th Iranian Joint Congress on Fuzzy and Intelligent Systems (CFIS 2022)

**Bam, Iran
2-4 March 2022**



**IEEE Catalog Number: CFP22TPD-POD
ISBN: 978-1-6654-7873-1**

**Copyright © 2022 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP22TPD-POD
ISBN (Print-On-Demand):	978-1-6654-7873-1
ISBN (Online):	978-1-6654-7872-4
ISSN:	2771-1366

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

CFIS2022 Papers

2022 9th Iranian Joint Congress on Fuzzy and Intelligent Systems (CFIS)

Conference Record Number: 54774

#	Paper Title	Authors	Pages
1	A Dynamic SDN-based Privacy-Preserving Approach for Smart City Using Trust Technique	Mehdi Gheisari ,AliAkbar Movassagh ,hamid esameili ,AAfiq Afzal Abbasi AAfiq Afzal Abbasi ,Yang Liu Yang Liu ,Mahdieh Izadpanahkakhk Mahdieh Izadpanahkakhk	1-5
2	A New Edge and Pixel-Based Image Quality Assessment Metric for Colour and Depth Images	Mousavi Seyed Muhammad Hossein ,S. Muhammad Hassan Mosavi	6-15
3	Seven Staged Identity Recognition System Using Kinect V.2 Sensor	Mousavi Seyed Muhammad Hossein ,Atiye Ilanloo	16-21
4	Intelligent Transmitter : Analysis of Effective parameters on Sensor Response of Gas Transmitter to Enhancement Measurment Accuracy by Intelligent Corrective Model Based on Artificial Neural Network	Mohammad Mohseni Ahad, Touba Hamoule	22-28
5	Best Proximity Point for Various Classes of Proximal Contraction in Fuzzy Metric Space	Razieh Gholipour ,hamid mazaheritehrani	29-31
6	Scattering and Regional Features Fusion Using Collaborative Representation for PolSAR Image Classification	Maryam Imani	32-37
7	Solving fuzzy bilevel linear programming problem based on interval approximation	Niloofer Davoudi ,Farhad Hamidi ,Hasan Mishmast Nehi	38-40
8	Communication-based Optimization Algorithm: A Meta-heuristic Technique for Solving Single-Objective Problems	Majid Hadi ,Reza Ghazizadeh	41-46
9	Improving The Obtained Results Of Monte Carlo Simulation For Interval Linear Programming Problem By Using Particle Swarm Optimization	moslem javanmard ,Hassan Mishmast Nehi	47-49
10	Calculating The Range Of Optimal Values Of The Interval Linear Programming Problems: Comparing Genetic Algorithm With Monte Carlo Simulation	moslem javanmard ,Hassan Mishmast Nehi	50-52
11	A New Technique For Deciding On The Interval Type-2 Fuzzy Transportation Problem Based On Interval Linear Programming Problems	moslem javanmard ,Hassan Mishmast Nehi	53-58
12	How weight-sharing mechanisms affect the performance of deep Siamese networks	Mahvash Mohazzebi,Mahdi Eftekhari, Mahdi Shariatzadeh	59-64
13	Early COVID-19 Diagnosis from Lung Ultrasound Images Combining RIULBP-TP and 3D-DenseNet	Vida Esmaeili ,Mahmood Mohassel Fegghi ,Seyed Omid Shahdi	65-69
14	ECG-Based Prediction of Epileptic Seizures Using Machine Learning Methods	Bahare Seifi ,Mahsa Barfi ,Mansour Esmailpour	70-76
15	Notes on energy of matching in fuzzy graphs	Majid Khalili ,Rajab Ali Borzooei	77-80
16	Farsi Text Detection and Localization in Videos and Images	Mobina Mosannafat ,Fatemeh Taherinezhad ,Hassan Khotanlou ,Elham Alighardash	81-86

**2022 9th Iranian Joint Congress on Fuzzy and intelligent Systems (CFIS), March 2-4, 2022, Bam, Iran
Higher Education Complex of Bam**

17	An Efficient Collaborative Filtering for Recommendation Systems Using Differential Machine Learning	mansooreh mirzaie ,Maryam Nooraei Abadeh ,zahra Derakhshandeh	87-93
18	An Ensemble Of Feature Selection Algorithms Using OWA Operator	Amin Hashemi ,Mohammad Bagher Dowlatshahi	94-99
19	Online streaming feature selection based on Sugeno fuzzy integral	Amin Hashemi ,Mohammad-Reza Pajooan ,Mohammad Bagher Dowlatshahi	100-105
20	A Fault Isolation Approach for Data-Driven Device Replacement Decision Making	Mohammad Mahdi Kalantari,Hossein Yektamoghadam,Amirhossein Nikoofard	106-111
21	Feature selection for multi-label text data: An ensemble approach using geometric mean aggregation	Mohsen Miri ,Mohammad Bagher Dowlatshahi ,Amin Hashemi	112-117
22	Evaluation multi label feature selection for text classification using weighted borda count approach	Mohsen Miri ,Mohammad Bagher Dowlatshahi ,Amin Hashemi	118-123
23	On P-torsion EQ-modules and P-cyclic EQ-modules	Batoul Ganji Saffar	124-126
24	A Novel Approach to Optimizing the Initial Path of Mobile Robots in Static Environments	Mostafa Mirzaei ,Aliakbar Niknafs	127-133
25	A novel ensemble feature selection method through Type I fuzzy	Nazanin Zahra Joodaki ,Mohammad Bagher Dowlatshahi ,Mehdi Joodaki	134-139
26	A Secure mechanism to protect UAV communications	Seyed Aref Ayati ,Hamid Reza Naji	140-145
27	Learning-based fuzzy c-means clustering using mixtures of Student's-t distributions with missing information	Saeed Darijani ,Hamid Bigdeli	146-151
28	Location of fire station in Bam city using Fuzzy Analytic Hierarchy Process	Amirabbas Abouei Mehrizi, Tahereh Kordi Karimabadi	152-157
29	Some Properties of L-graphs	Mohammad Mehdi Zahedi ,Elham Raisi Sarbizhan	158-162
30	The Behavior of L-graph Automata	Elham Raisi Sarbizhan ,Mohammad Mehdi Zahedi	163-166
31	Approximation of derivation-homomorphism fuzzy functional inequalities in matrix valued FC- \mathbb{I} -algebras	REZA SAADATI ,Safoura Rezaei Aderyani	167-172
32	Determining the Severity of Depression in Speech Based on Combination of Acoustic-Space and Score-Space Features	nasrin hamiditabar ,S. Jahanshah Kabudian ,Abdolah Chalechale	173-177
33	A new contrast enhancement method for Color dark and low-light images	Merdad Kargari ,Meysam Alavi	178-184
34	Detection and visualization of COVID-19 in chest Xray images using CNN and Grad-CAM (GCCN)	Hasan Hammad,Hassan Khotanlou	185-189
35	Adaptive TSK Fuzzy Terminal Sliding-Mode Control of Two Coupled Cart-Mounted Inverted Pendulums	Naser Padar,Mohammad Javad Mirzaei,Amir Abolfazl Suratgar	190-195
36	Fuzzy Control of Autonomous Vehicle at Nonsignalized Intersection in Mixed Traffic Flow	Matineh Hajyan ,Amirhossein Nikoofard	196-201
37	An Ensembled Text-based Multi-Stacked-CNN-BILSTM for Rumor Detection on Social Media	Rashid Behzadidoost ,Habib Izadkhah	202-207
38	Detection of multiple emotions in texts using a new deep convolutional neural network	Habib Izadkhah	208-213
39	Asymmetric distributions based on the t-copula	fereshteh arad ,ayyub sheikhi	214-216
40	Reinforcement Learning Reward Function for Test Case Prioritization in Continuous Integration	Hajar Mirzaei ,Mohammad Reza Keyvanpour	217-222
41	Application Of Machine Learning Methods in Diagnosis of Alzheimer Disease Based on Fractal Feature Extraction and Convolutional Neural Network	Morteza Amini ,Mir Mohsen Pedram	223-227
42	Face Recognition based on Multi-shape Morphological Profiles-based Covariance Descriptors and Log-Euclidean Kernel SVM	Behnam Asghari Beirami	228-231
43	Power Allocation in CRNs based on QoS and QoE	Mahdieh Ghazvini ,Marjane Moghbeli ,Omid Abedi ,Mostafa Ghazizadeh	232-238

**2022 9th Iranian Joint Congress on Fuzzy and intelligent Systems (CFIS), March 2-4, 2022, Bam, Iran
Higher Education Complex of Bam**

44	Improving Image Captioning with Local Attention Mechanism	zahra familsattari ,hassan khotanlou ,elham alighardash	239-243
45	An Aggregated Revenue-Driven VPP Model Based on Marginal Price Tracking for Profit Maximization	Zohreh Azani ,Hossein Shahinzadeh ,Shohreh Azani ,Gevork B. Gharehpetian ,Ersan Kabalci ,Mohamed Benbouzid	244-250
46	Artificial Gorilla Troops Optimizer for Optimum Tuning of TID Based Power System Stabilizer	Mahmoud A. El-Dabah ,Salah Kamel ,Mohamed Khamies ,Hossein Shahinzadeh ,Gevork B. Gharehpetian	251-255
47	Fractional entropy and its applications in fuzzy c-means clustering	Raana Beigmohamadi	256-259
48	Intelligent fault detection of planetary gearbox using vibration signal processing by empirical mode decomposition and an integrated artificial neural network-support vector machine classifier	Mahdi Armoon ,Marzie Lafouti ,Amirhossein Nikoofard	260-265
49	Efficiency evaluation using fuzzy DEA-TOPSIS and possibility theory	Hani Fekri ,Moosa Darijani	266-272
50	An efficient outlier detection method based on distance ratio of k-nearest neighbors	Reza Heydari Gharaei ,Rasoul Sharify ,Hossein Nezamabadi-pour	273-277
51	Improved LOF Algorithm Using Random Point	Rasoul Sharify ,Reza Heydari Gharaei ,S. Mahmoud Taheri	278-283
52	A Novel Control Strategy Based on Fuzzy Logic in Islanded Microgrid	Farzad Rastegar	284-289
53	A Nitrate Enzymatic Biosensor based on Optimized Machine Learning Techniques	Keyvan Asefpour Vakilian	290-294
54	Modified Relay Node Placement in dense 3D Underwater Acoustic Sensor Networks	zahra mohammadi	295-298
55	A Fractional Multi-commodity Network Flow Problem with Uncertain Multi-Choice Coefficients: Model Formulations and Solution Approach	Salim Bavandi, Seyed Hadi Nasseri, Chefi Triki	299-304