

2022 8th Iranian Conference on Signal Processing and Intelligent Systems (ICSPIS 2022)

**Mazandaran, Iran
28-29 December 2022**



**IEEE Catalog Number: CFP22K04-POD
ISBN: 978-1-6654-7624-9**

**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:	CFP22K04-POD
ISBN (Print-On-Demand):	978-1-6654-7624-9
ISBN (Online):	978-1-6654-7623-2

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

Table of Contents

A Heuristic-based Approach for Improvement the Performance of Probabilistic AODV Routing Algorithms in MANETS.....	1
Adaptive Frame Selection In Two Dimensional Convolutional Neural Network Action Recognition.....	7
Radio Frequency Fingerprint Identification of Drones Based on Variational Mode Decomposition.....	11
Evaluating Keyphrase Extraction Methods for Clustering Influenza-Related Scientific Papers.....	16
On linearization of the product of two continuous variables	23
Data-Driven Model Predictive Control for Load-Frequency Control in Islanded Microgrids	27
A Fuzzy Controller Design for a Stem-Vibration Strawberry Harvester Robot.....	33
Investigating the differences between atrial fibrillation and normal ECG signals using the EMD method	38
Automatic Separation of Effective Frames in the Analysis of Voluminous Videos Using Human-Object Interactions.....	45
An Artificial Neural Network Based Ensemble Model for Predicting Antigenic Variants: Application of Reduced Amino Acid Alphabets and Word2Vec	52
similarity-based approach for seed selection in diffusion model.....	58
An intelligent method for detecting weather conditions using deep learning on a combined dataset	64
Considering User Interests to Provid an Event Base News Stream Framework.....	69
A supervised deep learning-based approach for bilingual Arabic and Persian spell correction	74
Optimization Methods Can Increase the Durability of Smart Electrochemical Biosensors	81
Deep Multi-scale Dilated Convolution Neural Network with Attention Mechanism: A Novel Method for Earthquake Magnitude Classification	86
Profile face recognition based on elements by normalizing global and local features	92
Analysing the Impact of Time Delays on the Performance of Geothermal Power Plant Integrated Multi Area Hydro-Thermal Power System.....	98
Image Processing for Recognition of Digital Elements in HDL Code Generation	104
An Accelerated Coordinate Descent Method for Support Vector Machine.....	109
Methods of identifying unauthorized customers in cryptocurrency mining of distribution networks-a review	113
A feature selection method using slime mould optimization algorithm in order to diagnose plant leaf diseases	121
Smart short-term electric load forecasting considering the Covid-19 epidemic impact based on deep learning	126
Clustering-Based Anonymization Technique using Agglomerative Hierarchical Clustering	133
A Robust Pedestrian Detection Approach for Autonomous Vehicles	138
Predicting Bitcoin Fluctuations Using Deep Neural Networks	143

2022 8th Iranian Conference on Signal Processing and Intelligent Systems (ICSPIS)

Optimizing GoogleNet using New Connections and Auxiliary Layers Information.....	150
Detecting the drone by the combination of optical flow with various techniques.....	156
Parameter Tuning of Discontinues Lyapunov Based Controller Based on the Gray Wolf Optimization Algorithm Applied to a Robotic Manipulator.....	163
Presenting a hybrid method based on dark/bright channel, fuzzy and luminance mapping estimation for color image enhancement	169
Abnormal Behavior Detection in Electronic-Exam Videos Using BeatGAN	175
Reduce Cogging Torque in a Brushless DC Motor Via Multi-Objective Optimization.....	180
Chaotic Modified Binary Grey Wolf Optimizer Feature Selection method for Drug-Target interaction prediction Based on drug-protein Features	188
Detection of Chromosomes in Metaphase Images Using Segmentation Techniques.....	196
Traffic Captioning: Deep Learning-based Method to Understand and Describe Traffic Images	201
Speech Watermarking Based on the Combination of Frequency QIM and Convolutional Coding	207
Anomaly Detection In IoT Networks Using Hybrid Method Based On PCA-XGBoost.....	212
A comparative study of machine learning techniques for stock price prediction	217
A Meta Heuristic Approach for Trajectory Segmentation of Moving Objects.....	224
Cloud Resource Demand Prediction to Achieve Efficient Resource Provisioning	230
Fusion BASED AGV Robot Navigation Soulotion Comparative Analysis and Vrep Simulation	236
Comparison of Machine Learning Methods for Cryptocurrency Price Prediction	247
Multi-label detection of ophthalmic disorders using InceptionResNetV2 on multiple datasets.....	253
Video-based Person Re-Identification Using Attention Based on Separation Index.....	259
The Effects of Data Augmentation Methods on the Performance of Human Activity Recognition.....	265
A Near-Optimal Deep Detector for BER Minimization in an OFDM AF Relay System.....	271
SIVD: Dataset of Iranian Vehicles for Real-Time Multi-Camera Video Tracking and Recognition.....	276
A Reinforcement Learning-based Iterated Local Search for Software Modularization	283
Accuracy improvement in simple and complex Human Activity Recognition using a CNN-BiLSTM multi-task deep neural network	289
Self-supervised Sentiment Classification based on Semantic Similarity Measures and Contextual Embedding using metaheuristic optimizer.....	294
Efficient Top-k Keyword Search in Relational Databases Considering Maximum Integrated Candidate Network (MICN)	301
HeartSiam: A Domain Invariant Model for Heart Sound Classification	307
Validating TTGO T-Wristband Smart Band for the Lee Silverman Voice Treatment-BIG and Functional Activities.....	312
Fuzzy-based Deep Reinforcement Learning for Frost Forecasting in IoT Edge-enabled Agriculture	319
Det-SLAM: A semantic visual SLAM for highly dynamic scenes using Detectron2	324

2022 8th Iranian Conference on Signal Processing and Intelligent Systems (ICSPIS)

A Pattern Recognition Framework for Signal Processing in Metaverse.....	329
Using Group Deep Learning and Data Augmentation in Persian Sentiment Analysis	335
Monitoring and Evaluation of Wind Turbines Status Based on SCADA and ADSP Data Analysis.....	340
Comparison of Meta-Heuristic Algorithms for Solving Dominating Set Problems in WAMS Design ...	345
Machine learning approach for non-intrusive load monitoring in smart grids: new deep learning method based on long short-term memory and convolutional neural networks	352
An Automatic Method for Image Steganography Using Jensen Similarity Criterion	359
Performance Comparison between Simple and Adam–Eve-Like Genetic Algorithms in Optimal PMU Placement Problem	365
SS4IoT: Secure Search Over Encrypted Outsourced IoT Data.....	371