2024 IEEE International Symposium on Product Compliance Engineering - Asia (ISPCE-ASIA 2024)

Wuhan, China 25-27 October 2024



IEEE Catalog Number: CFP24BWD-POD ISBN:

979-8-3315-2301-5

Copyright © 2024 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:
 CFP24BWD-POD

 ISBN (Print-On-Demand):
 979-8-3315-2301-5

 ISBN (Online):
 979-8-3315-2300-8

ISSN: 2831-3402

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



Contents

Program in Detail

Papers
3GarmentFolding:Learning Efficient Garment Folding Based on Lift&Drag Dynamic Action
4A Study on Toy Age Grading Methods: A Comparative Study of Large Language Models and
Machine Learning Approaches
5DBCERT: Reconstruct the BERT model for Chinese spelling correction
6Research on Surface Defect Detection of Aluminium Based on Improved Faster RCNN
7Industrial Process Soft Sensing Based on Nonlinear Sparse Generalized Method of Moment
Estimation Model and Relevance Vector Regression24
8Spatio-Temporal Feature Attention Fusion for Fault Detection in Complex Industrial Processes 3
9Application of Air Quality Monitoring for 3D Printing Process
10Interpretable Semantic-aware Unsupervised Segmentation of Skin Lesions44
11Joint Task Offloading and Resource Allocation in Software-Defined Networking-Enabled
Vehicular Edge Computing: A Multi-Objective Approach
12Self-organizing Recurrent Fuzzy Neural Network for Nonlinear System Modeling5
13A Method for Target Locking in Combat Process Based on the Enhanced YOLOv86
14Application of the MOD-STL-Louvain Method for Community Detection in Manufacturing
Industries: A Study on Electricity Consumption69
15Time-Series Adjusted FasterPAM Clustering of Enterprise Electricity Consumption Based or
Autocorrelation Function 7:
16Analysis and Application of Retail Commodity Consumption Situation
17MSEDOA: Enhancing DOA Estimation with Multiscale Squeeze-and-Excitation Networks fo
Automotive Millimeter-Wave Radar
18Optimal Multi-channel Denial-of-Service Attack in the Consensus of Multi-Agent Systems 9
19Legal Judgement Prediction Via Contrastive Learning Based-retrieval And Semantic Embedding
90
20A Lightweight Algorithm for Detecting Steel Defects in Small Samples:RBSI-YOLOv8n 102
21Two-Stage Compliance Detection for Power Enterprises Based on NLI and LLM
24Wind turbine gearbox temperature prediction based on the DSCNN-BiLSTM model11:
25Bi-GRUI and Transformer Variant Based Missing Value Imputation Method for Electricity
Consumption Data
26Adaptive Control for Nitrate Nitrogen With Time Delays Based on Recurrent Fuzzy Neura
Network
27Optimizing Renewable Energy Heating: An Integration of TRNSYS Simulation of Solar and
Ground Heat Exchange Systems
28Recurrent Omnidirectional Stereo Matching Method Based on Mixture of Laplace Loss 13'
29Vertical Displacement of Slab End Detection and Quantification based on Multidimensional
Information Fusion of Point Cloud
30Task Offloading and Resource Allocation for ICVs in CFNs via Constrained MARL 149
31VariSize: A Dataset and Model for 3D Garment Automatic Grading and Editing Based on Laten
Space. 15

32Cooperative Scheduling and Hierarchical Memory Models for Multi-Agent Systems
33Exploring How Urban Morphology Influences Building Thermal and Environmental Performance
Alongside Renewable Energy Utilization
34DNN-Based Task Partitioning and Offloading with Reliability Guarantees in Multi-UAV-Assisted
MEC System
35Privacy Preserving Prescribed-Time Formation Algorithm of Multi-UAV Systems With Event-
Based Design 181
36Nonlinear system modeling based on wavelet neural networks
37Abnormal Vibration Detection by 2D Digital Image Correlation Analysis
43Classification of EEGs via Multi-layer Wavelet Transform and Feature Fusion to Enhance
Depression Screening
45Classification of cognitive activities EEGs via Singular Spectrum Analysis and Joint Approximate
Diagonalization of Eigen-matrices algorithm with ensemble classifier
46Classification of motion imagination via multivariate variational mode decomposition and Second-
Order Blind Identification using multi-channel data
50Classifition of Cognitive EEGs via Attention-based Multi-Scale Dilated Convolution Network 211
51Enhancing Driver Decision-Making Through Head-Up Display: A Study on Information Sensitivity
and Visualization Methods