2022 26th International Conference on Information Technology (IT 2022)

Zabljak, Montenegro
16 – 19 February 2022

IEEE Catalog Number: CFP22J51-POD
ISBN: 978-1-6654-2128-7

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: CFP22J51-POD
ISBN (Print-On-Demand): 978-1-6654-2128-7
ISBN (Online): 978-1-6654-2127-0

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

TABLE OF CONTENTS

Behavior of CuAlNi Alloys in Different Marine Environments 1
Ilija Knežević; Nemanja Pudar; Tatijana Dlabač; Špiro Ivošević

Blockchain-Based Transparency and Data Provenance in the Wine Value Chain 5
Tomo Popovic; Srdjan Krco; Nemanja Mišić; Aleksandra Martinovic; Ivan Jovovic

Modeling and Evaluation of Service Announcement in V2X Networks 10
András Wippelhauser; Szilárd Turi-Kováts; Ivana Ognjanovic; László Bokor

A New Framework for Quantum Image Processing and Application of Binary Template Matching 14
Hasan Yetis; Mehmet Karaköse

Distributed Deep Learning Approach for Optimal Hyper-Parameter Values 18
Ziya Tan; Mehmet Karakose

Speed-Up of Machine Learning for Sound Localization Via High-Performance Computing 22
Eric Michael Sumner; Marcel Aach; Andreas Lintermann; Runar Unnthorsson; Morris Riedel

An Efficient Deepfake Video Detection Approach with Combination of EfficientNet and Xception Models Using Deep Learning 26
Serhat Atas; Ismail Ilhan; Mehmet Karaköse

Identification of Nonlinear Hammerstein-Wiener Model for Representing a Field Voltage-Terminal Voltage Relation of Synchronous Generator 30
Mihailo Micev; Martin Calasan; Milovan Radulovic

EEG Signal Classification with Deep Neural Networks Using Visibility Graphs 34
Turan Göktug Altundogan; Mehmet Karaköse

Mel-Spectrogram Features for Acoustic Vehicle Detection and Speed Estimation 38
Nikola Bulatovic; Slobodan Djukanovic

Transfer Learning Based Fault Detection Approach for Rail Components 42
Merve Yilmazer; Mehmet Karakose; Ilhan Aydin; Erhan Akin

Regulated Output Synchronization of Multi-Agent Systems Via Output Feedback 46
Luka Martinović; Žarko Zečević; Božo Krstajić

Cloud-in-the-Loop Simulation of C-V2X Application Relocation Distortions in Kubernetes Based Edge Cloud Environment 50
Levente Maller; Péter Suskovics; László Bokor

An Example of SMS Service Development at the University of Montenegro Information System 54
Miodrag Zarubica; Slobodan Dukanovic; Lidija Milosavljevic; Jelena Terzic; Vladimir Gazivoda; Luka Filipovic

360-Degree Video Technology with Potential Use in Educational Applications 58
Andreja Samcovic

DevOps Methodology Usage in IT Companies in Montenegro 62
Marko Kljaic; Snežana Šćepanović

Planning a Case for Shared Data Retrieval Across the European Maritime Common Information Sharing Environment 66
Andrej Mihailovic; Nexhat Kapidani; Žarko Lukšić; Ronan Tournier; Giuseppe Vella; Marios Moutzouris; Baptista De Sousa; Alexis Blum; Zdravko Paladin

Some IT Tools for Virtual Exchange in Higher Education 72
Sanja Bauk

A Study on Student's Satisfaction of Using E-Learning System During the COVID-19 Pandemic 77
N. Nicholas; K. M. Hartono; V. Vincent; A. Gui

Image-Based Parking Occupancy Detection Using Deep Learning and Faster R-CNN 81
Zoja Šćekić; Stevan Cakic; Tomo Popovic; Anja Jakovljevic

An Internet of Things System for Environmental Monitoring Based on ESP32 and Blynk 86
Dejan Babic; Ivan Jovovic; Tomo Popovic; Nataša Kovač; Stevan Cakic

Potential Factors that Influences Customers' Intentions to Use m-Banking 91
Gabriella M. Umbas; Melliana Astrid; Rachel G. Reinatha; Anderes Gui; Muhammad S. Shaharudin

Experimental Evaluation of Distributed Sniffer Solution for Wireless Sensor Networks 95
Jelena Crnogorac; Jovan Crnogorac; Enis Kocan; Malisa Vucinic

New Features and Functionalities of the MasterRoute: Android Application for Finding the Optimal Traffic Route 99
Sario Al Mustafa; Nikola Žarić

The Use of micro:bit in Practical Classes 103
Ivana Cavor; Ilija Knežević; Nemanja Pudar; Lazar Mrdovic; Tatijana Dlabac

Audio Signal Denoising Based on Laplacian Filter and Sparse Signal Reconstruction 107
Miloš Brajović; Isidora Stanković; Miloš Daković; Ljubiša Stanković
Author Index