

CONTENTS

- 01 *Visual Slam-Based Mapping and Localization for Aerial Images*
by Onur Eker, Hakan Cevikalp and Hasan Saribas
- 02 *Neural Networks and Digital Arts: Some Reflections*
by Rômulo Augusto Vieira Costa and Flávio Luiz Schiavoni
- 03 *Harmonic and Sequence Component Estimation by a Novel Method*
by Abinash Rath and Rumpa Saha
- 04 *Distributed Approach for the Indoor Deployment of Wireless Connected Objects by the Hybridization of the Voronoi Diagram and the Genetic Algorithm*
by Wajih Abdallah, Sami Mnasri and Thierry Val
- 05 *Bridging the Urban-Rural Broadband Connectivity Gap using 5G Enabled HAPs Communication Exploiting TVWS Spectrum*
by Habib M. Hussien, Konstantinos Katzis, Luzango P. Mfupe and Ephrem T. Bekele
- 06 *An Overview on Various Techniques used for Correct Interpretation of Roadway Symbols*
by Abhinav Vinod Deshpande
- 07 *Physical Interpretation of the Solution to the Problem of Diffraction on a Half-plane with Non-Ideal Boundary Conditions*
by Michael Vesnik
- 08 *An Evaluation of 2D Human Pose Estimation based on ResNet Backbone*
by Hai-Yen -Tran, Trung-Minh Bui, Thi-Loan Pham and Van-Hung Le
- 09 *Text-Based Traffic Panels Detection using the Tiny YOLOv3 Algorithm*
by Saba Kheirinejad, Noushin Riahi and Reza Azmi
- 10 *Bearing Fault Diagnosis Based on Ensemble Depth Explainable Encoder Classification Model with Arithmetic Optimized Tuning*
by Kaibi Zhang, Yanyan Wang and Hongchun Qu
- 11 *Experimental Methodology to Find the Center of Gravity of a Solid*
by Joohoon Je and Eunsung Jekal
- 12 *Disinfecting Omnidirectional Mobile Robot with Vision Capabilities*
by Waqas Qaisar, Muhammad Tanveer Riaz, Abdul Basit, Yasir Naseem and Zohaib Nazir
- 13 *Cascaded Keypoint Detection and Description for Object Recognition*
by Abdulmalik Danlami Mohammed, Ojerinde Oluwaseun Adeniyi, Saliu Adam Muhammed, Mohammed Abubakar Saddiq and Ekundayo Ayobami
- 14 *Image Processing and Data Storage for Fire Alarm*
by Muhammad Zia ur Rahman, Saba Waseem, Sidra Riaz, Zainab Riaz, Aneeq Asif, Ayesha Siddiqa and Ali Asghar

- 15 *Human-Computer Interaction for Older Adults - a Literature Review on Technology Acceptance of eHealth Systems*
by Awais Ahmad and Peter Mozelius
- 16 *Determining the Parameters of the Sine-Wave Filter Factors Affecting Filtration Quality*
by Pustovetov Mikhail
- 17 *MC-SPWM and MC-THIPWM Methods for Symmetric and Asymmetric Design of CHB-MLI: A Study*
by Jigneshkumar Patel and Vijay Sood
- 18 *An Extreme Learning Machine for Blood Pressure Waveform Estimation using the Photoplethysmography Signal*
by Gonzalo Tapia, Rodrigo Salas, Matías Salinas, Carolina Saavedra, Alejandro Veloz, Alexis Arriola, Steren Chabert and Antonio Glaría
- 19 *Loaded by RL-Branch EMC Filter on the Output of the Inverter Transfer Function Taking into Account Resistances and Electric Transformer's Transfer Function Derivation*
by Pustovetov Mikhail
- 20 *A Deep Reinforcement Learning Approach to Eco-driving of Autonomous Vehicles Crossing a Signalized Intersection*
by Joshua Ogbemor, Xiangyu Meng and Xihai Zhang
- 21 *PWM Controlled Bidirectional Converter having Load-Independent Voltage-Gain*
by Muhammad Tanveer Riaz, Umar Saeed, Saba Waseem, Sidra Riaz and Eman Manzoor Ahmed
- 22 *Comparative Analysis of Scheduling Algorithms in 5G Uplink Transmission*
by Maryam Imran Sheik Mamode and Tulsi Pawan Fowdur
- 23 *Impact Analysis of Duck Curve Phenomena with Renewable Energies and Storage Technologies*
by Giovani Manuel Pitra and Kameswara Subrahmanya Sastry Musti
- 24 *Optimization of Proportional Solenoid for Flow Control Valve using Recursive Method in OCTAVE and FEMM*
by Tom Thampy, Emmanuel Gospel Raj Rivington and Rajath Chandrashekar
- 25 *Electrochemical Desalination Test of Bricks as a Building Material for Historical Buildings in Japan*
by Risako Fukami and Toshiya Matsui
- 26 *Layer Based Firewall Application for Detection and Mitigation of Flooding Attack on SDN Network*
by Yubaraj Gautam, Kazuhiko Sato and Bishnu Prasad Gautam
- 27 *Offline Signature Verification based on Edge Histogram using Support Vector Machine*
by Sunil Kumar Dyavaranahalli Sannappa, Kiran, Sudheesh Kannur Vasudeva Rao and Yashwanth Jagadeesh
- 28 *Competency Manifestation Clues within Interactions in Computer Mediated Communication*

- by Hocine Merzouki, Nada Matta, Hassan Atifi and Francois Rauscher
- 29 *Barriers of the Green Supply Chain Management Implementation: A Benchmark of Studies of Analytic Hierarchy Process and Interpretive Structural Modeling*
by Hamza Fahmy, Mohamed Mazouzi, Ayoub Alami Masmoudi and Tamasna El Mehdi
- 30 *An Analysis of SiC Power Electronics Implementation in Green Energy Based Extremely Fast Charging*
by Naireeta Deb and Rajendra Singh
- 31 *Machine-Learning based Decoding of Surface Code Syndromes in Quantum Error Correction*
by Debasmita Bhoumik, Pinaki Sen, Ritajit Majumdar, Susmita Sur-Kolay, Latesh Kumar KJ and Sundaraja Sitharama Iyengar
- 32 *Identification of Basic Respiratory Patterns for Disease-related Symptoms Through a Microphone Device*
by Amol M Khatkhate, Varad Raut, Madhura Jadhav, Shreya Alva, Kalpesh Vichare and Ameya Nadkarni
- 33 *Acceleration of Image Processing with SHA-3 (Keccak) Algorithm using FPGA*
by Argýrios Sideris, Theodora Sanida, Dimitris Tsiktisiris and Minas Dasygenis
- 34 *Research on Feature Extraction Method of Fiber Bragg Grating Vibration Monitoring Based on FFT*
by Mengxing Zhang, Youming Hua, Chunbin Chen, Chenkun Chu and Xiuli Zhang
- 35 *Use of Uncertain External Information in Statistical Estimation*
by Sergey Tarima and Zhanna Zenkova
- 36 *CRESustain: Approach to Include Sustainability and Creativity in Requirements Engineering*
by Clara Silveira, Vitor Santos, Leonilde Reis and Henrique Mamede
- 37 *Hexagonal CSRR Based Broadband Monopole Antenna at UHF-Band*
by Suleyman Meliksah Yayan and Ali Furkan Aslan
- 38 *Images Compression using Combined Scheme of Transform Coding*
by Zainab Jawad Ahmed, Loay Edwar George and Raad Ahmed Hadi
- 39 *CANClassify: Automated Decoding and Labeling of CAN Bus Signals*
by Paul Ngo, Jonathan Sprinkle and Rahul Bhadani
- 40 *Assessment of Village-wise Soil Nutrients and their Effect on Sugarcane Productivity in Western Maharashtra, India*
by Chhaya Narvekar and Madhuri Rao
- 41 *Trajectory Correction Method of Motion Description Language of Vertebral Milling Robot based on Force Feedback*
by Wei Ding, Zhaoming Liu, Hongwei Wang and Long Cui
- 42 *The Current Trends of Deep Learning in Autonomous Vehicles: A Review*
by Raymond Ning Huang, Jing Ren and Hossam A. Gabbar

- 43 *Fast Labeled Spanning Tree in Binary Irregular Graph Pyramids*
by Majid Banaeyan and Walter G. Kropatsch
- 44 *Linking Consumer Innovativeness to the Cryptocurrency Intention: Moderating Effect of the LOHAS (Lifestyle of Health and Sustainability) Lifestyle*
by Sooyeon Choi and Richard A. Feinberg