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TÜBİTAK

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SCOPE

- The Turkish Journal of Electrical Engineering & Computer Sciences is published electronically 6 times a year by the Scientific and Technological Research Council of Turkey (TÜBİTAK)
- Accepts English-language manuscripts in the areas of power and energy, environmental sustainability and energy efficiency, electronics, industry applications, control systems, information and systems, applied electromagnetics, communications, signal and image processing, tomographic image reconstruction, face recognition, biometrics, speech processing, video processing and analysis, object recognition, classification, feature extraction, parallel and distributed computing, cognitive systems, interaction, robotics, digital libraries and content, personalized healthcare, ICT for mobility, sensors, and artificial intelligence.
- Contribution is open to researchers of all nationalities.

ABSTRACTED

- Science Citation Index Expanded
- Scopus
- Academic Search Complete
- Inspec

Preface

The last issue of this year includes 46 papers, once again on a variety of topics in the areas of biomedical engineering, computer science, electromagnetics, power electronics, and signal processing. In their interesting paper, which is also the first contribution of this issue, Golrou et al. present an application of machine learning for the detection of slow-wave sleep and REM stages in the context of EEG (pages 2779-2791). In the following related contribution, Jahanseir et al. demonstrate the estimation of aesthesia depth via vector regression (pages 2792-2801). A comparative investigation of a nature-inspired algorithm for the classification of electrocardiogram patterns is presented by Dilmaç et al., where the authors consider eight different types of heartbeats for a thorough analysis (pages 2819-2830).

In the interesting paper by Pham et al. on image processing, an algorithm is presented for image restoration (pages 2831-2845). The authors of the paper clearly demonstrate that the new scheme outperforms the existing methods. This paper is followed by the contribution of Ozan and Gümüştekin, where the authors propose a method to reconstruct both geometrical and reflective properties of surfaces using structured light imaging (pages 2846-2857). On the following pages from 2858 to 2870, Letaifa demonstrates the use of machine learning for video-streaming services.

In their paper, Sakarya and Demirpolat focus on developing a fast and successful classification method for agricultural crops using time-series SAR data (pages 2958-2966). The architecture of the proposed method is clearly presented in Figure 1 on page 2961. A remarkable contribution by Belkadi et al. presents metamaterial filters for WLAN applications (pages 2976-2985). They present both simulation and experimental results to demonstrate the effectiveness of the developed designs. A fiber-optic interferometric sensor is the topic of the paper by Nedoma et al., where the authors demonstrate its efficacy in traffic density monitoring (pages 2986-2995).

Another excellent contribution on classification and regression analysis is presented in the context of power grids by Gururajapathy et al. on pages 3044-3056. In the following paper by Yıldız, wireless sensor networks are considered, where the author proposes an optimization model to maximize the network lifetime (pages 3057-3071). A directly related but quite different topic of power transformers, specifically their monitoring, is studied by Darabad (pages 3100-3114). In this interesting contribution, wavelet transformation is employed to develop a detection-classification system. A remarkable paper by Sis and Kavut should be mentioned particularly for readers interested in wireless power transfer systems (pages 3168-3180). Finally, I would like to draw attention to the remarkable papers by Mellah et al. on brushed DC machines (pages 3181-3191) and by Fang et al. on mobile edge computing (pages 3335-3344).

In 2017, we received a total of 2479 manuscripts and the editorial board worked overtime to make decisions on 2603 papers. At the moment, a remarkable ratio of 90% of submitted papers receive final decisions in less than 6 months, while our aim now is to further accelerate the review process without sacrificing (indeed, simultaneously improving) the high quality of the published papers.

Özgür Salih Ergül
Editor in Chief

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