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ABSTRACTED

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Preface

This issue of the Turkish Journal of Electrical Engineering & Computer Sciences includes 48 papers on a variety of topics, particularly in the areas of biomedical engineering, computer science, electronics, electromagnetics, power systems and networks, and signal processing. In their interesting paper, Nizami et al. present a novel feature selection algorithm for images and they demonstrate the favorable properties of their method in comparison to others in the literature (pages 2163-2177). The following paper by Verma and Pandey is on image processing, where the authors present a novel approach for estimating original images from noisy data (pages 2178-2193). The paper by Alzaq and Üstündağ presents the implementation of discrete wavelet transform on FPGAs (pages 2194-2205). Their comparative analysis reveals the advantages and disadvantages of different approaches in this area. A nice work on motion estimation is presented by Duvar and Urhan, where the experimental results clearly demonstrate the performance of their approach (pages 2206-2217).

In their paper, Arı and Hanbay demonstrate how deep learning can be used for brain tumor classification and detection (pages 2275-2286). Similarly, tomography is considered by Mudeng et al., where image construction is discussed in the context of diffuse optical tomography (pages 2287-2300). In a remarkable contribution from a very different area, Ceylan et al. consider tunable high-power amplifiers, including all processes from design to fabrication (pages 2327-2334). In the following paper, Naderi and Ghodrati present the application of carbon nanotubes in electronics (pages 2335-2346). As another interesting work, body area networks are considered by Dumanlı (pages 2395-2405), where the author presents design and fabrication of a novel antenna. On a related topic, a super wideband planar antenna is introduced by Rafique and Ud Din (pages 2417-2425).

As usual, we have several contributions in computer science. As a prominent contribution, artificial neural networks are considered by Yedjour et al. (pages 2465-2475). Catalyst optimizer is the topic of another interesting paper by Chawla and Baniwal (pages 2489-2499). It is remarkable that optimization is also considered in a quite different area, i.e. for electric power distribution, in the paper by Sabattin et al. (pages 2648-2660). As popular research subjects, neural networks are considered by Beyranvand et al. (pages 2661-2675), where the authors focus on the transient stability of electric power systems. Finally, an excellent contribution by Hamouda and Számel should be mentioned (2753-2767), where a new technique is presented for switched reluctance motors.

As in all previous issues, we have a mixture of topics, only some of which could be mentioned in this very short preface. With this issue, we have reached a total of 2778 pages published this year. With the huge variety of topics, this journal is unique in the sense that all researchers in electrical engineering and computer science can find interesting papers to read.

Özgür Salih Ergül
Editor in Chief

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