

# Electronics and Signal Processing – unlocking the potential of electronics and signals

Anastasios Doulamis

National Technical University of Athens, Athens, Greece

E-mail: [adoulam@cs.ntua.gr](mailto:adoulam@cs.ntua.gr).

On behalf of the Editorial Board of the Electronics and Signal Processing Journal, I would like to welcome all of you to its inaugural issue. The goal of the journal covers two scientific thematic regions: signal processing and electronics.

The signal processing field refers to whatever signal processing and analysis could be. This included but was not limited to analogue signal processing including the setups of sensors and instrumentation devices to achieve such an analysis and digital signal processing techniques. One dimensional signals are within the scope of the journal as well as two or multi-dimensional ones. The latter include images and videos as well as multi and hyper spectral image sensing signals. For the analysis, either conventional linear models can be applied or complicated non-linear schemes. The latter include machine learning algorithms and artificial intelligence tools as well as statistical analysis to find out statistical significance differences in the patterns of the signals. Theories for pattern detection, signal estimation, synchronization, forecasting, array processing, analysis of specialized types of signals such as radar, sonar, underwater signals, seismic, *etc.* are also covered. Special emphasis is given to prominent applications such as speech, audio/voice analysis & recognition, emotional sentimental analysis, biomedical processing, video processing & image-based behavioral recognition, image/video retrieval, remote sensing and satellite multi/hyper-spectral imaging, 3D reconstruction and photogrammetry, urban design using new theories from signal/image analysis, and transportation engineering including machine learning and pattern recognition tools.

The second scientific field of this journal is electronics, which covers the classical fields of electronics and microelectronics, integrated circuits design and simulation covering embedding systems, optoelectronics and power electronics, and the hardware dimension of semiconductors, diodes/transistors and physical phenomena on them, audio electronics, nanoelectronics and new materials. Finally, the new theories of quantum electronics, electronic packaging and flexible electronics are also included. This scientific field also accepts articles in the field of applications of the electronics such as in energy systems, industry and manufacturing, consumer electronics devices, intelligent transportation, bio-mechanical apparatuses for tackling human disabilities (blindness, amputation, listening, *etc.*) and any other application domain that can utilize electronic devices.



Copyright©2023 by the authors. Published by ELSP. This work is licensed under Creative Commons Attribution 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium provided the original work is properly cited.

---

The journal will accept submissions in gold open access and free of charge until 2024. Surveys and review articles are also welcome. All articles will be peer reviewed by at least two independent reviewers and high scientific quality is encouraged.

We would like to thank the production team for the journal and of course all the Associate Editors and the Reviewers for their support in submitting to and referencing to work in the journal.