

# The International Conference on Electronics, Control, Optimization and Computer Science

# CALL FOR PAPERS SPECIAL SESSION ON

# "Al techniques for Healthcare applications and diagnosis"

Track I: Deep learning for medical image analysis (DLMIA'2020)

for ICECOCS'20

December 2<sup>nd</sup> – 3<sup>rd</sup>, 2020 • Kenitra, Morocco

#### **Session Co-Chairs:**

Prof. Aissam BERRAHOU, Mohammed V University, Morocco.

Prof. Mohamed LAZAAR, Mohammed V University, Morocco.

Prof. Abderahim MESBAH, Mohammed V University, Morocco.

## **Session description**

This session aims to present recent advances in medical image processing and analysis using deep learning (e.g., convolutional neural networks, auto encoders, generative adversarial networks, spiking neural networks, deep belief networks) and computational intelligence (e.g., multilayer perceptron, genetic algorithms).

**The objective of this** special session is to advance scientific research of computational intelligence in medical image analysis. The session is going to foster the debate within the clinical domain of the most important breakthroughs in artificial intelligence techniques applied to medical imaging, boosting emerging transdisciplinary fields such as computational radiology and computational pathology.

The topics of interest include, but are not limited to:

- Deep Learning for neuroimaging and oncological imaging analysis.
- Application of ML methods for neurodegenerative disease studies.
- Deep neural networks for medical image super-resolution, de-noising and synthesis.
- 3D medical image analysis.
- Visualization and explainable deep neural network in medical signal analysis.
- Translational multimodality imaging and biomedical applications.
- ML techniques for segmentation, classification, or dimensionality reduction of medical images.

#### **SUBMISSION**

Papers must be submitted electronically for peer review through EDAS by July 5th, 2020:

IMPORTANT: All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).

### **DEADLINES**

July 5<sup>th</sup>, 2020: deadline for paper submission

August 25<sup>th</sup>, 2020: notification of acceptance/reject

September 20<sup>th</sup>, 2020: deadline for final paper

October 1<sup>st</sup> 2020: Early Registration November 3<sup>rd</sup> 2020: Late Registration