

*****CFP TEMPLATE*****

***** CALL FOR PAPERS *****

SUBMISSION DUE DATE: [November 30, 2018]

SPECIAL SESSION ON [Artificial Intelligence and Image Processing Advances in Astronomy, Space Science, and Smart City]

[ICICC-2019: International Conference on Innovative Computing and Communication]

Guest Editor: [Dr. Yosry Azzam, National Research Institute of Astronomy & Geophysics, Cairo, Egypt – yosryahmed@yahoo.co.uk]

INTRODUCTION:

[Developments in artificial intelligence are helping in the prediction the probability of life on other planets. In addition, deep sky exploration and Earth observations, aiming at a better understanding of space imaging to provide new tools for the specialists of these area. In various domains of planetary and stellar sciences, massive volumes of high-resolution spacecraft and terrestrial image data sets need to be processed. As a result, automatic reliable, precise and fast reduction techniques and approaches are needed.

Forecasting of solar irradiance is significant for planning the operations of power plants which convert renewable energies into electricity which is crucial for sustainable development and smart city. Artificial intelligence techniques such as Artificial Neural Networks (ANN) are used for this task . ANN are one of the main tools used in machine learning, and are particularly good at identifying patterns that are too complex for a biological brain to process.

This Special session aims to gather research material to crystallize state-of-the-art research on the use of Artificial Intelligence and image processing in Astronomy, Space Science, and smart city.]

RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:

- Sustainable development and smart city
- Machine learning in astronomy, smart city, and space science
- ANN use in astronomical image classification
- ANN use in solar forecasting and prediction
- Artificial Intelligence in Smart City and Solar Energy Applications

- Fuzzy Logic techniques used in smart city and various astronomy and space science fields.
- Expert Systems
- Wavelet transforms
- Genetic Algorithms in Astronomy
- Astronomical Image Processing tools
- Spectral Clustering Algorithms
- Pattern Matching
- CCD Camera image filtering tools
- Radio Astronomy
- X-ray Imaging in Astronomy
- Space robots
- Astronomical Telescopes and their control Systems
- Smart city and astronomical data processing and analysis
- Smart city and astronomical data archiving.

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on **[Artificial Intelligence and Image Processing Advances in Astronomy, Space Science, and Smart City] on or before [November 30, 2018]**. All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at http://icicc-conf.com/paper_submission.html. All submitted papers will be reviewed on a double-blind, peer review basis.

NOTE: While submitting paper in this special session, please specify **[Artificial Intelligence and Image Processing Advances in Astronomy, Space Science, and Smart City]** at the top (above paper title) of the first page of your paper.

All inquires should be should be directed to the attention of:

[Dr. Yosry Azzam]

Guest Editor

[Artificial Intelligence and Image Processing Advances in Astronomy, Space Science, and Smart City]

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