

Special Session on
Machine Learning in Energy Applications

of

**The 14th International Conference on Machine Learning and Applications (ICMLA'15)
Miami, Florida, USA**

<http://www.icmla-conference.org/icmla15/>

December 9 – 11, 2015

Energy is still one of the most important issues in the World under its various aspects: production and renewability, transport and distribution, management and quality. The recent researches and developments in the production of energy have been focused on alternating and renewable sources as the fossil energy sources are reducing day by day. Therefore power system efficiency, power quality, renewable generation, growing number of interconnections, power exchanges among utilities, need for better improvements in energy and power system planning, operation and control have been very significant topics for the researchers. New challenges using the techniques such as pattern recognition, expert systems, artificial neural networks, fuzzy systems, evolutionary programming, and other artificial intelligence methods and their hybrid combinations can significantly contribute to solve problems in energy systems. Especially, advances in Machine Learning (ML) and recent web-based and mobile technologies provide new challenges in machine learning for energy applications.

The aim of this session is to provide a platform to present and discuss recent advancements on machine learning methods in energy and its applications.

Papers are sought on a range of topics that include, but are not limited to:

- alternating energy sources
- renewable energy sources
- energy production
- fault diagnosis, quality and maintenance in energy systems
- distribution networks for power systems
- parallel operations and interconnectivity of the power systems
- hybrid power systems
- energy efficiency and smart power saving solutions
- energy conscious and intelligent power management
- security issues in energy applications
- computational methods
- architectures and algorithms
- web-based applications
- test and recovery systems
- Education and training

Papers for this special session should be submitted by **August 6, 2015**, at the regular paper submission website (<http://www.icmla-conference.org/icmla15/>). Papers should not exceed a maximum of **6 pages** (including abstract, body, tables, figures, and references), and should be prepared as a pdf in 2-column IEEE format. For detailed instructions please see the guidelines on the conference website. Accepted papers will be published in the conference proceedings, as a

hardcopy. All accepted papers must be presented by one of the authors in order to be published in the conference proceedings.

In addition, a selected number of accepted papers will be invited for possible inclusion, in an expanded and revised form, in special issue of International Journal of Renewable Energy Research, IJRER (www.ijrer.org)

If you have any questions do not hesitate to direct your questions to the special session organizer Dr. İlhami COLAK (icolak@gelisim.edu.tr), Istanbul Gelisim University.

The important dates for this special session are:

Submission for the main conference: July 6, 2015

Submission for the workshops and special sessions: August 31, 2015

Notification of Acceptance: September 9, 2015

Camera-ready Papers & Pre-registration: October 1, 2015

The ICMLA Conference: December 9-11, 2015

Special Session Organizer:

- Dr. İLHAMİ COLAK (icolak@gelisim.edu.tr).

Special Session Co-organizers:

- Dr. Fujio Kurokawa (fkurokaw@nagasaki-u.ac.jp)
- Dr. Ramazan Bayindir (bayindir@gazi.edu.tr).

Program Committee:

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