

**The 17th IEEE International Conference on Machine Learning and Applications
(ICMLA-2018)**

**Special Session: Machine Learning in Big Data and Information Security Issues
December 17-20, 2018, Orlando, Florida, USA**

www.icmla-conference.org/icmla18

Aim

Recent developments in information and communication technologies (ICTs) are to require better analysis and to secure information and systems in designing, developing, testing, understanding, accessing, processing, storing, and sharing information in electronic environments. The importance of information and system security increases all the time in diversity as well as in quantity because of continuous threats encountered in many new forms on internet and systems. In order to provide better solutions to secure information and communication systems, new approaches, methods, techniques, technologies and concepts are always required. It is known that big data analytics enables new perceptions and solutions to security systems.

Advances in Machine Learning (ML) and Big Data (BD) provide new challenges and solutions to information security problems encountered in applications and theories. ML and BD techniques have found widespread applications and implementations in security issues. Many ML and BD techniques, approaches, algorithms, methods and tools are extensively used by security experts and researchers to achieve better results and to develop and design better and more robust security systems.

Scope

The aim of this special session is to:

- share the current and new research topics,
- bring researchers and experts together to discuss and share their experiences,
- enhance personal, enterprise, national and international awareness,
- increase the collaboration among university – industry – institutions, and
- help to develop and design better security systems

in applications of ML and BD methods to the information and system security fields.

This session aims to provide a platform to present and discuss recent advancements in big data and security applications using BD and ML methods. The main topics are given below:

- Information Security Issues and Big Data
- Data Privacy and Machine Learning
- Privacy and Security Issues in Big Data
- Big Data Analytics
- Applications and Implementation of Big Data in Information and Cyber Security
- Cyber Threat Intelligence
- Big Data and Fighting Cyber Terror
- Data Science in Information and Cyber Security

- Knowledge Discovery, Integration, Transformation, Information Retrieval
- Business Intelligence,
- Information and Cyber Security Issues
- Artificial Intelligence Techniques for Big Data and Cyber Security
- Industrial Challenges in Big Data and Data Mining
- Recent Theory, Trends, Technologies and Applications in Big Data and Cyber Security Issues.
- Future Directions and Challenges

Submission Guidelines and Instructions

Papers submitted for reviewing should conform to IEEE specifications. Manuscript templates can be downloaded from [IEEE website](#). The maximum length of papers is 8 pages. All the papers will go through double-blind peer review process. Authors' names and affiliations should not appear in the submitted paper. Authors' prior work should be cited in the third person. Authors should also avoid revealing their identities and/or institutions in the text, figures, links, etc.

Papers must be submitted via the [CTM System](#) by selecting the track “**Special Session on Machine Learning in/for Big Data and Information Security Issues**”. All accepted papers must be presented by one of the authors, who must register. Detailed instructions for submitting papers can be found at [How to Submit](#).

Paper Publication:

Accepted papers will be published in the ICMLA 2018 conference proceedings (published by IEEE). A selected number of accepted papers will be invited for possible inclusion, in an expanded and revised form, in some journal special issues such as *International Journal of Information Security Science* (www.ijiss.org).

Important Dates:

Submission Deadline: September 7, 2018

Notification of Acceptance: October 7, 2018

Camera-ready papers & Pre-Registration: October 17, 2018

Special Session Organizers

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