

**The 15th IEEE International Conference on Machine Learning and Applications
(IEEE ICMLA '16), Anaheim, USA
18-20 December 2016
www.icmla-conference.org/icmla16**

**Special Session on
Machine Learning in Information and Cyber Security**

AIMS AND SCOPE

Recent developments in information and communication technologies require secure 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 secure information and systems, new approaches, methods, techniques, technologies and concepts are always required.

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

The aim of this workshop on Information and System Security Issues 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, and
- increase the collaboration among university–industry–institution

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

This workshop aims to provide a platform to present and discuss recent advancements in security solutions and applications using ML methods.

Papers are sought on a range of topics that include Security Applications and Implementations using ML methods but are not limited to

- ❖ Information Security
- ❖ Cryptography and Cryptoanalysis
- ❖ Steganography and Steganalysis
- ❖ Security Risk Analysis, Modelling, Evaluation and Management
- ❖ Software Security
- ❖ Secure Coding, Source Code Auditing and Review
- ❖ Critical Information and Infrastructure Security
- ❖ Security Standards, Protocols and Policies

- ❖ Trust Models
- ❖ Key and Identity Management
- ❖ Smart Card, RFID, NFC, 3G, 4G, etc. Security
- ❖ Operating System Security
- ❖ Clouds and Virtual Machine Security
- ❖ Biometrics
- ❖ Mobile Communication and Application Security
- ❖ Data Privacy, Privacy Theory and Engineering
- ❖ e-Governance and e-Government Security
- ❖ E-Sign and Public Key Infrastructure
- ❖ Digital Forensics, Procedures, Tools, Techniques, Surveillance Technology
- ❖ Securing Networks, Computers, Services, Systems, Databases.
- ❖ Securing Mobile Networks and Devices
- ❖ Wireless, Ad Hoc and Sensor Network Security
- ❖ Web and Web Application Security
- ❖ Ethical Hacking
- ❖ Information Security Audits
- ❖ Securing Digital Rights and Management
- ❖ Security Weaknesses on Information and Communication
- ❖ Penetration Tests, Tools and Techniques
- ❖ Social Engineering Attacks and Prevention
- ❖ Intrusion Detection and Prevention Systems
- ❖ Content Protection
- ❖ Malicious Software Threats and Protection
- ❖ Artificial Intelligence Techniques for Information Security System
- ❖ Public Awareness and Education for Information Security System
- ❖ Recent Theory, Trends, Technologies and Applications
- ❖ Future Directions and Challenges in Information Security System

Papers should be submitted for this special session at the regular paper submission website (<http://www.icmla-conference.org/icmla16/>). Papers should not exceed a maximum of 6 pages (including abstract, body, tables, figures, and references), and should be submitted as a pdf in 2-column IEEE format. Detailed instructions for submitting the papers are provided on the conference at home page.

All accepted papers and posters will be published in an electronic proceedings by IEEE Xplore Digital Library. All accepted papers must be presented by one of the authors 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 workshop issue of *International Journal of Information Security Science*, IJISS (www.ijiss.org)

Special Session Chair

Dr. Seref SAGIROGLU
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Program Committee Members

Dr. Uraz YAVANOGLU, Arizona State University, USA
Dr. Tiago A. ALMEDIA, Federal University of Sao Carlos, Brazil
Dr. Cihan VAROL, Sam Houston State University, USA
Dr. Sedat AKLEYLEK, 19 May University, TR

Important Dates:

Paper Submission Deadline	August 6th, 2016
Notification of Acceptance	September 7th, 2016
Camera-Read Papers	October 1st, 2016

If you have any question about this session, please do not hesitate to ask your question to ss@gazi.edu.tr or sagirogluseref@gmail.com