The main mission of this special issue “Advanced Research on Software Security Design and Applications” is to be the premier and authoritative source for the most innovative scholarly and professional research and information pertaining to aspects of Software Security. Such issue presents advancements in the state-of-the-art, standards, and practices of software security, in an effort to identify emerging trends that will ultimately define the future of “the software security”.

This special issue focuses on advanced research in the practical applications and the theoretical foundations of software security, through presentation of the most up-to-date advances and new directions of research in the field from various scholarly, professional, and practitioner perspectives. An interdisciplinary look at software security including engineering and business aspects, such issue covers and encourages high-quality research exposition.

This issue will explore the foundations of software security. The important software vulnerabilities and attacks will be considered that exploit them -- such as buffer overflows, SQL injection, and session hijacking -- and defenses will be also considered that prevent or mitigate these attacks, including advanced testing and program analysis techniques. Importantly, we take a "build security in" mentality, considering techniques at each phase of the development cycle that can be used to strengthen the security of software systems. The objective of this special issue is to capture the latest advances in this research field. Topics of interest include but are not limited to the ones listed below.

- Penetration testing
- Software Security Technologies & services
- Software Security Applications
- Software Security Architecture
- Software Security Patterns
- Software Security Standard
- Built-in security
- Low-level, memory-based attacks
Paper Selection

Papers will be selected from ACM ICEMIS 2015 and open call-for-papers.

1. Selected Papers from The International Conference on Engineering and Management of Information System (ICEMIS 2015). The ICEMIS conference serves as good platforms for our members and the entire engineering and Information Technology community to meet with each other and to exchange ideas. The conference website is http://www.iares.net/

Papers relevant to Software Security will be considered, based on the reviews (comments and scores) and the presentations during the conference. Each selected paper must be substantially extended, with at least 30% difference from its conference version, and the title of the extended version must clearly differ from the title of the article presented at the conference.

2. Open Call-For-Papers All unpublished papers in addressed areas are welcome. Each paper (including the selected papers from the conference) will go through a rigorous peer-review process by at least three international reviewers. Submissions must be made directly to the guest editors of the special issue.

Guest Editors

Dr. Shadi A. Aljawarneh, Associate Prof. in Software Engineering and Security, Editor of IJCAC, IGI-Global, USA, saljawarneh@acm.org, shadi.jawarneh@yahoo.com

Dr. Federica Cena, University of Turin, Italy, cena@di.unito.it

Dr. Abdelsalam Mattuk, Benghazi University, Libya, Dr.abdelsalam.maatuk@gmail.com

Important Dates

<table>
<thead>
<tr>
<th>Submission Due</th>
<th>November 26, 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>1stRound Notification</td>
<td>January 31, 2016</td>
</tr>
<tr>
<td>Revision</td>
<td>March 31, 2016</td>
</tr>
<tr>
<td>Final Notification</td>
<td>April 30, 2016</td>
</tr>
</tbody>
</table>
Potential Reviewers

Potential reviewers are the experts in the research areas all over the world, who will be mainly selected from ICEMIS 2015 program committees

Anna Goy, Universita' di Torino, Italy
Ryan K. L. Ko, HP Labs Singapore, Singapore
Maik A. Lindner, SAP Research, UK
Shiyong Lu, Wayne State University, USA
Yuzhong Sun, Chinese Academy of Science, China
Ray Walshe, Irish Centre for Cloud Computing and Commerce, Ireland
Sanjay P. Ahuja, University of North Florida, USA
Junaid Arshad, University of Leeds, UK
Juan Caceres, Telefónica Investigación y Desarrollo, Spain
Jeffrey Chang, London South Bank University, UK
Kamal Dahbur, NYIT, Jordan
Ravindra Dastikop, SDMCET, India
Sam Goundar, Victoria University of Wellington, New Zealand & KYS International College, Melaka - Malaysia
Sofyan Hayajneh, Isra University, Jordan
Sayed Amir Hoseini, Iran Telecommunication Research Center, Iran
Gregory Katsaros, National Technical University of Athens, Greece
Mariam Kiran, University of Sheffield, UK
Anirban Kundu, Kuang-Chi Institute of Advanced Technology, China
Sarat Maharana, MVJ College of Engineering, Bangalore, India
Manisha Malhorta, Maharishi Markandeshwar University, India
Saurabh Mukherjee, Banasthali University, India
Giovanna Petrone, Università degli Studi di Torino, Italy
Nikolaos P. Preve, National Technical University of Athens, Greece
Vanessa Ratten, Deakin University, Australia
Jin Shao, Peking University, China
Bassam Shargab, Isra University, Jordan
Luis Miguel Vaquero Gonzalez, HP, Spain
Chao Wang, Oak Ridge National Laboratory, USA
Jiaan Zeng, Indiana University Bloomington, USA
Yongqiang Zou, Tencent Corporation, China