

Guest Editorial Preface

Special Issue on Cyber Security and Privacy in Communication Networks

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It is a great matter of pleasure for us to bring this special issue of “International Journal of Cyber Security and Privacy (IJISP)” covering the seven relevant papers of “International Conference on Cyber Security (ICCS) 2017” that was organized in Kota (Rajasthan) India on August 13-14, 2017:

1. Energy & SLA Efficient Virtual machine placement in Cloud Environment using Non-dominated Sorting Genetic Algorithm
2. Behavioral Modeling of Malicious Objects in a Highly Infected Network under Quarantine Defense
3. A Mutation Operator-Based Scenario for Evaluating Software Clone Detection Tools and Techniques
4. Security Protocol with IDS Framework Using Mobile Agent in Robotic MANET
5. Enhanced Security for Electronic Health Care Information Using Obfuscation and RSA Algorithm in Cloud Computing
6. Efficient Routing Protocol for Location Privacy Preserving in Internet of Things
7. A Survey: Intrusion Detection Techniques for Internet of Things

The first article presents an energy-efficient VM placement algorithm for the mapping of virtual machines over physical machines. The idea of the mapping of virtual machines over physical machines is to lessen the count of physical machines used inside the data center.

The noble work of second article put forwarded here exclusively expresses a highly infected e- epidemic model in a computer network. The authors establish the Basic reproduction number R_0 , which explicitly brings out the stability conditions.

In the third article, authors propose a mutation operator-based editing taxonomy for generating different software clone types. In addition, a hypothetical scenario is developed using mutation operator-based editing taxonomy and this hypothetical scenario is used to evaluate various software clone detection techniques and tools.

The fourth article highlights few security problems arising due to connectivity issues among robots and proposes an energetic MANET based robotic protocol called PD-ROBO with a dedicated Intrusion Detection System (IDS) framework that uses mobile agent technique to avoid replay attack in robotic based MANET.

The fifth article presents a framework carried out for EHR confidential data on cloud storage. Moreover, the proposed approach combines the Obfuscation and RSA encryption together to enforce confidentiality and authentication. Through this framework, the data confidentiality and authentication scheme on EHR information can be enforced on clouds storage

The sixth article presents few notions of existing privacy models and the amplified techniques using random path and then possible solution to preserve the location of nodes along with less transmission time.

The seventh article focuses on IoT introduction, Architecture, Technologies, Attacks and IDS. The main objective of this paper is to provide a general idea of Internet of Things, various intrusion detection techniques and security attacks associated with IoT.

The papers presented in the ICCS 2017 went through strict refereeing and examination resulting in a current rejection rate of 57.6%. We are delighted to say that this is in no small part due to the hard work of the editorial board and reviewers, in not only refereeing the papers submitted, but raising the standard of the quality of papers that we will publish.

Last but not the least, as the guest editor of ICCS 2016 submissions, we are thankful to those people who have worked with us in planning and organizing both technical arrangements. In particular, we are thankful to the program chairs for their support and the program committee for their timely reviewing of articles.

We hope that the quality research work published in this issue will be able to serve humanity and science.

C P Gupta
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