

CALL FOR PAPERS

Cyber Security Threats and Defense Advances

IEEE Transactions on Emerging Topics in Computing

Special Issue

IEEE Transaction on Emerging Topics in Computing (TETC) seeks original manuscripts for a Special Issue/Section on **Cyber Security Threats and Defense Advances** scheduled to appear in the **second issue of 2018**.

With the rapid advancements in information and communications technology (ICT) and ‘expansion’ of cyber space, cyber security is of crucial importance to the stability of our Internet-connected society. For example, how do we ensure secure communications between servers, network nodes, terminals and user applications across public and private networks? Defending our cyber space is both a research challenge and an operational challenge. Designing effective security solutions is complicated by the need to carefully balance between security and usability, as well as the amount of efforts and resources required. For example, how do we achieve better security without compromising on communication speed?

This special issue aims to solicit state-of-the-art research advances in cyber-security threat mitigation and defense solutions, including the underlying cryptographic techniques. The issue welcomes both theoretical research, and applied research (e.g. implementations and applications). Topics of interest includes (but not limited to):

- Cyber security, system security and information security
- Cyber security based on post-quantum cryptography
- Cyber defence strategies and responsibilities, Cyber intelligence systems and technologies
- Cyber threats and threat intelligence
- Efficient/Secure implementation of cryptographic algorithms
- Physical Unclonable Functions for IoT Security
- Cryptanalysis and attacks on cryptosystems
- Internet security and content cloud services
- Security frameworks, architectures and protocols
- Security, trust and privacy measurement, Security management and technologies
- Data mining for security complex network applications
- Social security networks
- Malware and Anti-malware SOC and SIP testing

Submitted articles must not have been previously published or currently submitted for journal publication elsewhere. As an author, you are responsible for understanding and adhering to our submission guidelines. You can access them at the IEEE Computer Society web site, www.computer.org. Please thoroughly read these before submitting your manuscript. Please submit your paper to Manuscript Central at <https://mc.manuscriptcentral.com/tetc-cs>

Please note the following important dates.

Submission Deadline: June 1 2017

Reviews Completed: September 1 2017

Major Revisions Due (if Needed): October 1 2017

Reviews of Revisions Completed (if Needed): November 1 2017

Minor Revisions Due (if Needed): December 1 2017

Notification of Final Acceptance: February 1 2018

Publication Materials for Final Manuscripts Due: March 1 2018

Publication date: Second Issue 2018 (June Issue)

Guest Editors			
<p>Zhe Liu Professor College of Computer Science and Technology, Nanjing University of Aeronautics and Astronautics Nanjing, 211106 sdliuzhe@gmail.com</p>	<p>Kim-Kwang R. Choo Associate Professor School of Information Technology and Mathematical Science, University of South Australia Raymond.choo@unisa.edu.au</p>	<p>Weiqiang Liu Associate Professor College of Electornic and Information Engineering, Nanjing University of Aeronautics and Astronautics Nanjing, 211106 liuweiqiang@nuaa.edu.cn</p>	<p>Muhammad K. Khan Professor Center of Excellence in Information Assurance, King Saud University, Saudi Arabia mkhurram@ksu.edu.sa</p>