Call for Papers

Data Analytics for Cyber Security Workshop

The 14th International Wireless Communications & Mobile Computing Conference

IWCMC 2018 Website: http://iwcmc.org/2018//
Submission Link: https://edas.info/newPaper.php?c=23637

St. Raphael Resort & Marina, Limassol, Cyprus June 25 — 29, 2018 Technically sponsored by: IEEE and IEEE Cyprus Section

Chairs:

Wojciech Mazurczyk, Warsaw University of Technology, Poland, wmazurczyk@tele.pw.edu.pl
Elias Bou-Harb, Florida Atlantic University, USA, ebouharb@fau.edu
Mark Scanlon, University College Dublin, Ireland, mark.scanlon@ucd.ie
Chadi Assi, Concordia University, Canada, assi@ciise.concordia.ca
Martin Husák, Masaryk University, Czech Republic, husakm@ics.muni.cz
Nasir Ghani, University of South Florida, USA, nghani@usf.edu
George Kaddoum, École de Technologie Supérieure, Canada, Georges.Kaddoum@etsmtl.ca

Scope:

Cyberspace continues to be threatened by devastating and debilitating attacks, which often compromise and damage invaluable data and systems. Cyber threats targeting evolving paradigms such as the Internet-of-Things (IoT) and Cyber-Physical Systems (CPS) are already introducing an evolving dimension of cyber-warfare. Moreover, other specialized attacks such as Distributed Denial of Service (DDoS) continue to severely threaten both Internet and corporate networks. Further, the recent trend of ransomware is also targeting a plethora of victims across various sectors, causing drastic consequences. In this context, it is crucial to explore and devise diverse methodologies to infer, analyze, characterize, attribute and mitigate malicious activities.

To this end, this workshop is focused on exploring theoretical and empirical data analytics to support the investigation of malicious activities, i.e., data-driven tools, technologies, approaches and techniques. The workshop is soliciting data-centric, original research and development contributions at any OSI layer for addressing evolving cyber security challenges. Prospective authors are cordially invited to submit technical papers, up to 6 pages in length on topics including, but no limited to, the following:

- Data analytics for securing future home networks, IoT/CPS and body-area networks
- Data analytics for combating cyber-crime: anti-phishing, anti-spam, anti-fraud techniques
- Data analytics for cyber situational awareness
- Data analytics for securing emerging technologies: sensor/mobile/personal networks and systems

- Data analytics for securing cloud computing
- Data methods and tools to monitor and visualize security phenomena
- Data analytics for securing data storage and sharing for wireless and future 5G networks
- Collaborative data analytics in cyber security
- Analysis of encrypted network traffic: Fingerprinting, classification and exploration
- Novel systems and algorithms which leverage measurement-based findings
- Data-driven automated security analysis of source code and binaries
- Data-driven intrusion and anomaly detection and prevention
- Learning-based security data analytics: Models, applications and resiliency
- Streaming data analytics for security
- Predictive cyber security, cyber forensics and digital investigations

Accepted and presented papers will be published in the IEEE IWCMC 2017 proceedings and will be submitted to the IEEE digital library (IEEE Xplore).

Submission Guidelines:

Prospective authors are invited to submit original technical papers—up to 6 pages of length, using the EDAS link https://edas.info/newPaper.php?c=23637 for possible publication in the IWCMC 2018 Conference Proceedings, which will be included in the IEEE Xplore. Selected papers will further be considered for possible publication in three special issues in the following Journals. For more information, visit: http://iwcmc.org/2018/

- 1. The International Journal of Sensor Networks (IJSNet) http://www.inderscience.com/browse/index.php?journalCODE=ijsnet
- 2. The International Journal of Autonomous and Adaptive Communications Systems (IJAACS)
 - http://www.inderscience.com/jhome.php?jcode=ijaacs
- 3. KSII Transactions on Internet and Information Systems: http://www.itiis.org/
- 4. Peer-to-Peer Networking & Applications: http://www.springer.com/engineering/signals/journal/12083
- 5. Cyber-Physical Systems journal: www.tandfonline.com/loi/tcyb20
- 6. Recent Advances on Communications and Networking Technology: http://www.benthamscience.com/journal/index.php?journalID=racnt

Note: There will be best paper award, best Symposium award and best Workshop award.

Important Dates:

Submission: 10 January 2018 Acceptance notification: 30 March 2018 Registration/Camera-ready: 30 April 2018

TPC Members:

- Maciej Korczynski, Grenoble Institute of Technology, France
- Luca Caviglione, National Research Council, Italy
- Joerg Keller, University of Hagen, Germany
- Alessandro L. Koerich, École de Technologie Supérieure, Canada
- Mahsa Pourvali, Cisco Systems, USA
- Claude Fachkha, University of Dubai, UAE
- Jean-Francois Lalande, CentraleSupelec, France
- Eman El Sheikh, University of West Florida, USA
- Makan Pourzandi, GFTE Ericsson Research Security, Canada
- Michal Choras, University of Science and Technology, Poland
- Khalil El-Khatib, University of Ontario Institute of Technology, Canada
- Steffen Wendzel, Worms University of Applied Sciences, Germany
- Satyanarayana Vuppala, Université du Luxembourg, Luxembourg
- Lingyu Wang, Concordia University, Canada
- Jorge Crichigno, University of South Carolina, USA
- Krzysztof Cabaj, Warsaw University of Technology, Poland
- Yasin Yılmaz, University of South Florida, USA