

**UNIVERSITATEA „PETRU MAIOR” DIN TÎRGU MUREȘ
FACULTATEA DE ȘTIINȚE ȘI LITERE
DEPARTAMENTUL DE INFORMATICĂ**

Domeniul de licență: Informatică

Program de studii: Informatică

Dr. ing. Kiss István

LISTA DE LUCRĂRI

1. Teza de doctorat

- Doctor în Știința Calculatoarelor – perioada: 2013-2016
- Facultatea Automatică și Calculatoare; Universitatea Tehnică din Cluj-Napoca
- **Coordonator științific:** Prof. dr. ing. Gheorghe Sebestyen
- **Titlul tezei de doctorat:** TEHNICI PENTRU ÎMBUNĂTĂȚIREA SECURITĂȚII INFRASTRUCTURILOR CRITICE MODERNE
- Susținută la: **...08 Septembrie 2016.....**
- **Confirmare: OMEdC 47226/29.11.2016**

2. Articole publicate în reviste indexate ISI Web of Science

- [1] B. Genge, P. Haller, **I. Kiss**, A Framework for Designing Resilient Intrusion Detection Systems for Critical Infrastructures, *International Journal of Critical Infrastructure Protection*, Elsevier, vol. 15, pp. 3-11, 2016. (I.F.: **1.500**).
- [2] B. Genge, P. Haller, **I. Kiss**, Cyber Security-Aware Network Design of Industrial Control Systems, *IEEE Systems Journal*, *IEEE Systems Council*, Vol. 11(3), pp. 1373 – 1384, 2017. DOI: 10.1109/JSYST.2015. 2462715. (I.F.: **3.882**)
- [3] B. Genge, **I. Kiss**, and P. Haller, A system dynamics approach for assessing the impact of cyber attacks on critical infrastructures, *International Journal of Critical Infrastructure Protection*, Elsevier, Vol. 10, pp. 3-17, 2015, DOI: 10.1016/j.ijcip.2015.04.001. (rated as top 5 paper at Ninth IFIP WG 11.10 Int'l Conf. on Critical Infrastructure Protection, SRI, Arlington, Washington DC, USA, 2015). (I.F.: **1.500**)

3. Articole publicate în conferințe indexate ISI Web of Knowledge

- [4] **I. Kiss**, B. Genge, P. Haller, A Framework for Testing Stealthy Attacks in Energy Grids, IEEE 11th International Conference on Intelligent Computer Communication and Processing, September 3-5, Cluj-Napoca, Romania, 2015, pp. 553-560. doi: 10.1109/ICCP.2015.7312718. (ISI Proceedings, IEEE Explore)

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- [5] B. Genge, I. Kiss, P. Haller and C. Siaterlis, Generating high quality data for the protection of modern critical infrastructures, *4th International Symposium on Digital Forensic and Security (ISDFS)*, Little Rock, AR, 2016, pp. 53-58. doi: 10.1109/ISDFS.2016.7473517. (ISI Proceedings, IEEE Explore)
- [6] I. Kiss, B. Genge, and P. Haller, Behavior-based Critical Cyber Asset Identification in Process Control Systems Under Cyber Attacks, in *16th International Carpathian Control Conference*, pp.196-201, 27-30 May 2015, DOI: 10.1109/CarpathianCC.2015.7145073, Print ISBN: 978-1-4799-7369-9. (IEEE Explore).
- [7] I. Kiss, B. Genge, P. Haller, A Clustering-based Approach to Detect Cyber Attacks in Process Control Systems, INDIN 2015 IEEE International Conference on Industrial Informatics, 22-24 July 2015, Cambridge, UK, pp. 142-148. - **Best Paper Award and 2016 IEEE IES Best Conference Paper Award.** (ISI Proceedings, IEEE Explore)
- [8] B. Genge, P. Haller, I. Kiss, A Linear Programming Approach for K-Resilient and Reliability-Aware Design of Large-Scale Industrial Networks, *International Conference on Ad-hoc, Mobile, and Wireless Networks (ADHOC-NOW)*, Special Track on "Efficient, reliable, and secure smart energy networks", pp. 288-302, Athens, Greece, 2015, DOI: 10.1007/978-3-319-19662-6_20, Print ISBN: 978-3-319-19661-9, Online ISBN: 978-3-319-19662-6, ISSN: 0302-9743. (Springer Verlag, DBLP)
- [9] I. Kiss, B. Genge, P. Haller, and G. Sebestyen, Data clustering-based anomaly detection in industrial control systems, in *2014 IEEE International Conference on Intelligent Computer Communication and Processing (ICCP)*, Cluj Napoca, 2014, pp. 275-281, DOI: 10.1109/ICCP.2014.6937009, Print ISBN: 978-1-4799-6568-7. (ISI Proceedings, IEEE Explore)
- [10] I. Kiss, P. Haller, and A. Beres, Denial of Service attack detection in case of Tennessee Eastman challenge process, in *8th International Conference Interdisciplinarity in Engineering, INTER-ENG 2014*, Vol. 19, pp. 835-841, Tirgu-Mures, Romania, 2014, DOI: 10.1016/j.protcy.2015.02.120. (ISI Proceedings, SCOPUS)
- [11] A. Beres, B. Genge, and I. Kiss, A Brief Survey on Smart Grid Data Analysis in the Cloud, in *8th International Conference Interdisciplinarity in Engineering, INTER-ENG 2014*, Vol. 19, pp. 858-865, Tirgu-Mures, Romania, 2014, DOI: 10.1016/j.protcy.2015.02.123. (ISI Proceedings, SCOPUS)

4. Articole publicate în conferințe indexate BDI

- [12] I. Kiss, B. Genge, A Methodology for Monitoring and Control Network Design, *11th International Conference on Critical Information Infrastructures Security*, Paris, France, 2016, pp. 111-122 (Springer).
- [13] B. Genge, P. Haller, I. Kiss, Big Data Processing to Detect Abnormal Behavior in Smart Grids, *1st EAI International Conference on Smart Grid Inspired Future Technologies*, May 19-20, 2016, Liverpool, Great Britain. Volume 175 of the series Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, pp. 214-221, 2016. (Springer)

2015
7/47

5. Capitle din cărți și alte publicații

Capitole de carte

- [14] B. Genge, H. Sandor, P. Haller, A. Beres, and I. Kiss, Using Software Defined Networking to Mitigate Cyber Attacks in Industrial Control Systems, *Securing Cyber Physical Systems*, CRC Press, USA, 2015, pp. 305 -330. (Invited Book Chapter).

Neindexate

- [15] I. Kiss, B. Genge, P. Haller, and G. Sebestyen, Ipari Vezérlési Rendszerek biztonságának növelése Hálózat Túlterheléses támadások esetén - Security improvement of Industrial Control Systems in case of Denial of Service attacks, in XXIV. Számítástechnika és Oktatás Konferencia – SzámOkt, Szekelyudvarhely, 2014. ISSN: 1842-4546.

6. Brevete

Nu este cazul.

7. Proiecte de cercetare pe baza de contract/grant obținute prin competiție internațională

2014-2018: Proiect de cercetare FP7 Marie Curie CIG intitulat "SERENITI: Cyber security and resilience of networked critical infrastructures", PCIG14-GA-2013-631128 (<http://upm.ro/sereniti/>) – MEMBRU.

8. Contracte de interes științific și/sau economic cu parteneri din țară și din străinătate

2016 (Mai–Septembrie): Grant de cercetare intitulat "SDIIT: Software Defined Industrial Internet of Things" finanțat de "Accenture Industrial Software Solutions (AISS) grant program for Universities for IoT activity" – MEMBRU.

9. Aplicații - Resurse umane - Premiera rezultatelor cercetării

Premii UEFISCDI (premiera rezultatelor cercetării):

B. Genge, P. Haller, I. Kiss: A Framework for Designing Resilient Intrusion Detection Systems for Critical Infrastructures, *International Journal of Critical Infrastructure Protection*, Elsevier, vol. 15, pp. 3-11, 2016 – ISI Galben.

B. Genge, I. Kiss, P. Haller: A system dynamics approach for assessing the impact of cyber attacks on critical infrastructures, *International Journal of Critical Infrastructure Protection*, Elsevier, vol. 10, pp. 3-17, 2015– ISI Galben.

Premii Best Paper:

2016 IEEE IES Best Conference paper Award: The 42nd Annual Conference of the IEEE Industrial Electronics Society (IECON2016), Florence, Italy. (I. Kiss, B. Genge, P. Haller: A Clustering-based Approach to Detect Cyber Attacks in Process Control Systems).

I. Kiss
B. Genge

Best Paper Award: I. Kiss, B. Genge, P. Haller: A Clustering-based Approach to Detect Cyber Attacks in Process Control Systems, INDIN 2015 IEEE International Conference on Industrial Informatics, 22-24 July 2015, pp. 142-148, Cambridge, UK.

Premii Competitii Internationale:

Premiul I: "Hacking the Energy Grid: From Individual Substation to Black-out", Positive Hack Days V, Moscow, Russia, 2015.

10. Alte contribuții științifice

Citări / *h*-index

Google Scholar: 102, *h*-index: 5

Scopus: 40, *h*-index: 4

Data

12 Decembrie 2017

Semnatura

