

Athena room (main conference)  
Nafsika and Nefeli rooms (workshops)

## 2021 IEEE International Conference on Cyber Security and Resilience

**Legend:** 2021 IEEE CSR Workshop on...

- Actionable Cyber Threat Intelligence (ACTI)
- Cyber Resilience and Economics (CRE)
- Cyber Ranges and Security Training (CRST)
- Data Science for Cyber Security (DS4CS)
- Electrical Power and Energy Systems Security, Privacy and Resilience (EPES-SPR)
- Maritime Cyber Security (MCS)
- Resilient Artificial Intelligence (RAI)

### Monday 26th of July

#### 08:40–09:00 Welcome from the chairs WL

**CET** Stavros Shiaeles, Nicholas Kolokotronis, Emanuele Bellini  
**Room: Athena**

#### 09:00–10:00 Plenary session PL1

**CET** Chair: Emanuele Bellini, University of Campania Vanvitelli (IT)  
**Room: Athena**

**Invited talk:** Israel national and organisational cyber resiliency strategy and policy  
Isaac Ben Israel

#### 10:00–11:20 Technical session CSR1

**CET** Chair: Francesco Flammini, Mälardalen University (SE)  
**Room: Athena**

- 10:00–10:20 [Anomaly based resilient network intrusion detection using inferential autoencoders](#)  
A. Hannan, C. Gruhl, and B. Sick
- 10:20–10:40 [Act proactively: An intrusion prediction approach for cyber security](#)  
P. Panagiotidis, C. Angelidis, I. Karalis, G. Spyropoulos, and A. Liapis
- 10:40–11:00 [A stream clustering algorithm for classifying network IDS alerts](#)  
R. Vaarandi
- 11:00–11:20 [Statistical metamorphic testing of neural network based intrusion detection systems](#)  
F. Rehman and C. Izurieta

#### 10:00–11:20 Keynote session WS-DS4CS1

**CET** Chair: Christos Tryfonopoulos, University of Peloponnese (GR)  
**Room: Nafsika**

- 10:00–10:20 [Welcome from the DS4CS workshop chairs](#)  
C. Tryfonopoulos, S. Skiadopoulos, and S. Idreos
- 10:20–11:00 **Invited talk:** [Tracking IoT botnets in the wild](#)  
Angelos K. Marnierides, University of Glasgow (UK)

### 10:00–11:20 Technical session WS-CRST1

**CET** Chair: Konstantina-Eleni Davri, Center for Security Studies (GR)

**Room: Nefeli**

- 10:00–10:20 [The current state of the art and future of European cyber range ecosystem](#)  
C. Virag, T. Lieskovan, J. Čegan, and M. Merialdo
- 10:20–10:40 [Frankenstack: Real-time cyberattack detection and feedback system for technical cyber exercises](#)  
M. Pihelgas and M. Kont
- 10:40–11:00 [ECHO federated cyber range: Towards next-generation scalable cyber ranges](#)  
N. Oikonomou, N. Mengidis, M. Spanopoulos – Karalexidis, A. Voulgaridis, M. Merialdo, I. Raisr, K. Hanson, P. de La Vallee, T. Tsikrika, S. Vrochidis, and K. Votis
- 11:00–11:20 [The Cyber-MAR project: First results and perspectives on the use of hybrid cyber ranges for port cyber risk assessment](#)  
O. Jacq, P. Giménez Salar, K. Parasuraman, J. Kuusijärvi, A. Gkaniatsou, E. Latsa, and A. Amditis

### 11:20–11:40 Coffee break

**CET**

### 11.40–13:00 Technical session CSR2

**CET** Chair: Stefano Marrone, University of Campania Vanvitelli (IT)

**Room: Athena**

- 11.40–12:00 [Detecting SQL injection web attacks using ensemble learners and data sampling](#)  
R. Zuech, J. Hancock, and T. Khoshgoftaar
- 12.00–12:20 [SK-Tree: A systematic malware detection algorithm on streaming trees via the signature kernel](#)  
C. Salvi, T. Lyons, M. Lemercier, T. Cochrane, V. Chhabra, and P. Foster
- 12.20–12:40 [Software vulnerabilities, products and exploits: A statistical relational learning approach](#)  
C. Figueiredo, J. G. Lopes, R. Azevedo, G. Zaverucha, D. S. Menasche, and L. Aguiar
- 12.40–13:00 [Rapid ransomware detection through side channel exploitation](#)  
M. Taylor, E. Larson, and M. Thornton

### 11.40–13:00 Technical session WS-DS4CS2

**CET** Chair: Spiros Skiadopoulos, University of Peloponnese (GR)

**Room: Nafsika**

- 11.40–12:00 [Social media monitoring for IoT cyber-threats](#)  
S. Alevizopoulou, P. Koloveas, C. Tryfonopoulos, and P. Raftopoulou
- 12.00–12:20 [Data exfiltration: Methods and detection countermeasures](#)  
J. King, G. Bendiab, N. Savage, and S. Shiaeles
- 12.20–12:40 [Detecting adversarial DDoS attacks in software-defined networking using deep learning techniques and adversarial training](#)  
B. Nugraha, N. Kulkarni, and A. Gopikrishnan

### 11.40–13:00 Technical session WS-CRST2

**CET** Chair: Angelos Amditis, Institute of Communication and Computer Systems (GR)

**Room: Nefeli**

- 11.40–12:00 [The SPIDER cyber security investment component \(CIC\)](#)  
M. Tsiodra, M. Chronopoulos, M. Ghering, E. Karapistoli, N. Gerosavva, and N. Kyllis
- 12.00–12:20 [The THREAT-ARREST cyber ranges platform](#)  
G. Hatzivasilis, S. Ioannidis, M. Smyrlis, G. Spanoudakis, F. Frati, C. Braghin, E. Damiani, H. Koshutanski, G. Tsakirakis, T. Hildebrandt, L. Goeke, S. Pape, O. Blinder, M. Vinov, G. Leftheriotis, M. Kunc, F. Oikonomou, G. Magilo, V. Petrarolo, A. Chieti, and R. Bordianu

12.20–12:40 [Cyber security certification programmes](#)  
E.-C. Davri, E. Darra, I. Monogioudis, A. Grigoriadis, C. Iliou, N. Mengidis, T. Tsikrika, S. Vrochidis, A. Peratikou, H. Gibson, D. Haskovic, D. Kavallieros, E. Chaskos, P. Zhao, S. Shiaeles, N. Savage, B. Akhgar, X. Bellekens, and M. Amine Ben Farah

**13:00–14:00 Lunch break**  
CET

**14:00–15:20 Technical session CSR3**

CET Chair: Nicholas Kolokotronis, University of the Peloponnese (GR)

**Room: Athena**

14:00–14:20 [Reinforcement learning-driven attack on road traffic signal controllers](#)  
N. Seifollahpour Arabi, T. Halabi, and M. Zulkernine

14:20–14:40 [Resilient boot](#)  
S. Ostrikov

14:40–15:00 [Cyber resilience for self-monitoring IoT devices](#)  
M. Medwed, V. Nikov, J. Renes, T. Schneider, and N. Veshchikov

15:00–15:20 [Resilience learning through self adaptation in digital twins of human-cyber-physical systems](#)  
E. Bellini, F. Bagnoli, M. Caporuscio, E. Damiani, F. Flammini, I. Linkov, P. Lio, and S. Marrone

**14:00–15:20 Technical session WS-DS4CS3**

CET Chair: Christos Tryfonopoulos, University of Peloponnese (GR)

**Room: Nafsika**

14:00–14:20 [Unveiling MIMETIC: Interpreting deep learning traffic classifiers via XAI techniques](#)  
A. Nascita, A. Montieri, G. Aceto, D. Ciuonzo, V. Persico, and A. Pescape

14:20–14:40 [Detecting attacks on IoT devices using featureless 1D-CNN](#)  
A. Khan and C. Cotton

14:40–15:00 [DAHID: Domain adaptive host-based intrusion detection](#)  
O. Ajayi and A. Gangopadhyay

**15:20–15:40 Coffee break**  
CET

**15:40–17:20 Technical session CSR4**

CET Chair: Stavros Shiaeles, University of Portsmouth (UK)

**Room: Athena**

15:40–16:00 [Machine learning on knowledge graphs for context-aware security monitoring](#)  
J. Soler Garrido, D. Dold, and J. Frank

16:00–16:20 [SoK: Investigation of security and functional safety in industrial IoT](#)  
E. Tomur, U. Gulen, E. Ustundağ Soykan, M. A. Ersoy, F. Karakoc, L. Karacay, and P. Comak

16:20–16:40 [Mc-PUF: memory-based and machine learning resilient strong PUF for device authentication in internet of things](#)  
P. Williams, H. Idriss, and M. Bayoumi

16:40–17:00 [SoK: Autonomic cybersecurity – Securing future disruptive technologies](#)  
C. Rouff, L. Watkins, R. Sterritt, and S. Hariri

17:00–17:20 [ERAMO: Effective remote attestation through memory offloading](#)  
J. H. Ostergaard, E. Dushku, and N. Dragoni

### 15:40–17:20 Technical session WS-MCS1

**CET** Chair: Leandros Maglaras, De Montfort University (UK)

**Room: Nefeli**

- 15:40–16:00 [Advancing the state of maritime cybersecurity guidelines to improve the resilience of the maritime transportation system](#)  
L. Drazovich, L. Brew, and S. Wetzel
- 16:00–16:20 [The impact of COVID-19 on the security and resilience of the maritime transportation system](#)  
L. Brew, L. Drazovich, and S. Wetzel
- 16:20–16:40 [Impact assessment of anomaly propagation in a naval water distribution cyber-physical system](#)  
N. Pelissero, P. Merino Laso, and J. Puentes
- 16:40–17:00 [A backwards compatible approach to authenticate automatic identification system messages](#)  
M. Struck and J. Stoppe
- 17:00–17:20 [Quantum cryptography in maritime telecommunications](#)  
M. Papathanasaki, P. Fountas, L. Maglaras, C. Douligeris, and M. A. Ferrag

### 17:20–17:40 Coffee break

**CET**

### 17:40–18:20 Panel discussion WS-MCS2

**CET** Chairs: Christos Douligeris, University of Piraeus (GR);

Despina Polemi, University of Piraeus (GR)

**Room: Nefeli**

**Panel topic:** [Future trends and perspectives in maritime communications](#)

**Moderator:** Despina Polemi, University of Piraeus (GR)

- Ravishankar Borgaonkar, SINTEF Digital (NO)
- Bruno Bender, Ventura (FR)
- Sofoklis Efremidis, Maggioli SpA (IT)
- Corinna Schmitt, Unibw (DE)

## Tuesday 27th of July

### 09:00–10:00 Plenary session PL2

**CET** Chair: Nicholas Kolokotronis, University of the Peloponnese (GR)

**Room: Athena**

**Invited talk:** [Threat modelling for machine-learning systems](#)

Ernesto Damiani

### 10:00–11:20 Technical session CSR5

**CET** Chair: Bogdan Ghita, University of Plymouth (UK)

**Room: Athena**

- 10:00–10:20 [ENAD: An ensemble framework for unsupervised network anomaly detection](#)  
J. Liao, S. G. Teo, P. P. Kundu, and T. Truong-Huu
- 10:20–10:40 [Using deep packet inspection in cyber traffic analysis](#)  
L. Deri and F. Fusco
- 10:40–11:00 [Towards anomaly detection in smart grids by combining complex events processing and SNMP objects](#)  
M. L. Itria, E. Schiavone, and N. Nostro

11:00–11:20 [Clustering analysis of email malware campaigns](#)  
R. Zhang, S. Wang, R. Burton, M. Hoang, J. Hu, and A. Nascimento

**10:00–11:20 Technical session WS-CRE1**

**CET** Chair: Nicholas J. Multari, Pacific Northwest National Lab (US)

**Room: Nafsika**

10:00–10:20 [Welcome from the CRE workshop chairs](#)  
N. J. Multari and J. Picciotto

10:20–10:40 [Modelling cyber-risk in an economic perspective](#)  
I. Bothos, V. Vlachos, D. Kyriazanos, I. Stamatiou, K. G. Thanos, P. Tzamalīs, S. Nikolettseas, and S. Thomopoulos

10:40–11:00 [Disposable identities; Enabling trust-by-design to build more sustainable data driven value](#)  
J. Isohanni, K. M. Hermsen, L. Goulden, M. Ross, and J. Vanbockryck

11:00–11:20 [Influence pathways: Mapping the narratives and psychological effects of russian COVID-19 disinformation](#)  
A. Hoyle, T. Powell, B. Cadet, and J. van de Kuijt

**11:20–11:40 Coffee break**

**CET**

**11.40–13:00 Technical session CSR6**

**CET** Chair: Emanuele Bellini, University of Campania Vanvitelli (IT)

**Room: Athena**

11.40–12:00 [Enabling efficient common criteria security evaluation for connected vehicles](#)  
A. Stamou, P. Pantazopoulos, S. Haddad, and A. Amditis

12.00–12:20 [Analyzing cascading effects of spoofing attacks on ADS-B using a discrete model of air traffic control responses and AGMOD dynamics](#)  
M. R. Kamaruzzaman, B. O. Sane, D. Fall, Y. Taenaka, and Y. Kadobayashi

12.20–12:40 [Towards HybridCAN, a hybrid bridged CAN platform for automotive \(security\) testing](#)  
D. Granata, M. Rak, and G. Salzillo

12.40–13:00 [Securing an MQTT-based traffic light perception system for autonomous driving](#)  
A.-A. Affia and R. Matulevicius

**13:00–14:00 Lunch break**

**CET**

**14:00–15:00 Plenary session PL3**

**CET** Chair: Stavros Shiaele, University of Portsmouth (UK)

**Room: Athena**

**Invited talk:** [Actionable and interpretable AI \(AI<sup>2</sup>\) and resilience](#)  
Igor Linkov

**15:20–15:40 Coffee break**

**CET**

**15:40–17:20 Technical session CSR7**

**CET** Chair: Fudong Li, University of Portsmouth (UK)

**Room: Athena**

15:40–16:00 [Secure communication in smart meters using elliptic curve cryptography and digital signature algorithm](#)  
S. Shukla, S. Thakur, and J. G. Breslin

- 16:00–16:20 [Enhancing medical data security on public cloud](#)  
N. Santos, W. Younis, B. Ghita, and G. Masala
- 16:20–16:40 [Development of a testbed for fully homomorphic encryption solutions](#)  
S. Marrone, A. Tortora, E. Bellini, A. Maione, and M. Raimondo
- 16:40–17:00 [On security of key derivation functions in password-based cryptography](#)  
G. Kodwani, S. Arora, and P. Atrey

**15:40–17:20 Keynote session WS-CRE2**

**CET** Chair: Rosalie McQuaid, MITRE Corporation (US)

**Room: Nafsika**

- 15:40–16:10 **Invited talk:** [A process-based approach to cybersecurity certification](#)  
Volkmar Lotz, SAP Security Research (FR)
- 16:10–16:40 **Invited talk:** [Adaptable cyber matrix in energy security hybrid threat analysis](#)  
Gabriel Raicu, Constanta Maritime University (RO)
- 16:40–17:10 **Invited talk:** [Hybridized exercising of critical infrastructure cyber resilience](#)  
George Sharkov, European Software Institute (BG)

**17:20–18:20 Awards session AW**

**CET** Chairs: Emanuele Bellini, University of Campania Vanvitelli (IT); Giancalro Fortino, University of Calabria (IT)

**Room: Athena**

**18:20–20:00 Panel discussion WS-CRE3**

**CET** Chair: Jeffrey Picciotto, MITRE Corporation (US);  
Nicholas J. Multari, Pacific Northwest National Lab (US)

**Room: Nafsika**

- 18:20–18:50 **Invited talk:** [Cyber reflections, cyber projections](#)  
Paul Nielsen, Carnegie Mellon University/Software Engineering Institute (US)
- 18:50–19:20 **Invited talk:** [On the resilience of command and control architectures for cyber defense](#)  
Marco Carvalho, Florida Institute of Technology (US)
- 19:20–20:00 **Panel topic:** [The next step for cyber resilience](#)  
**Moderator:** Nicholas J Multari, Pacific Northwest National Lab (US)  
— Marco Carvalho, Florida Institute of Technology (US)  
— Volkmar Lotz, SAP Security Research (FR)  
— Paul Nielsen, Carnegie Mellon University/Software Engineering Institute (US)  
— Gabriel Raicu, Constanta Maritime University (RO)  
— George Sharkov, European Software Institute (BG)

## Wednesday 28th of July

**09:00–10:00 Plenary session PL4**

**CET** Chair: Stavros Shiaeles, University of Portsmouth (UK)

**Room: Athena**

**Invited talk:** [Recognising knowledge and skills for cyber security and resilience](#)  
Steve Furnell

**10:00–11:20 Technical session CSR8**

**CET** Chair: Nicholas Kolokotronis, University of the Peloponnese (GR)

**Room: Athena**

- 10:00–10:20 [Real-time, simulation-based identification of cyber-security attacks of industrial plants](#)  
A. Patel, T. Schenk, S. Knorn, H. Patzlaff, D. Obradovic, and A. Botero Halblaub

- 10:20–10:40 [Web bot detection evasion using generative adversarial networks](#)  
C. Iliou, T. Kostoulas, T. Tsikrika, V. Katos, S. Vrochidis, and I. Kompatsiaris
- 10:40–11:00 [Understanding and mitigating banking trojans: From Zeus to Emotet](#)  
K. P. Grammatikakis, I. Koufos, N. Kolokotronis, C. Vassilakis, and S. Shiaeles
- 11:00–11:20 [Insider threat detection using deep autoencoder and variational autoencoder neural networks](#)  
E. Pantelidis, G. Bendiab, S. Shiaeles, and N. Kolokotronis

**10:00–11:20 Keynote session WS-ACTI1**

**CET** Chair: Vasilis Katos, Bournemouth University (UK)

**Room: Nafsika**

- 10:00–10:20 [Welcome from the ACTI workshop chair](#)  
V. Katos
- 10:20–11:00 **Invited talk:** [Stop chasing rabbits: The case of actionable intelligence where the rubber meets the road](#)  
Azeem Aleem, NTT (UK)

**10:00–11:20 Technical session WS-RAI1**

**CET** Chair: Fiammetta Marulli, University of Campania (IT)

**Room: Nefeli**

- 10:00–10:20 [Welcome from the RAI workshop chairs](#)  
F. Marulli, F. Mercaldo
- 10:20–10:40 [Towards resilient artificial intelligence: Survey and research issues](#)  
O. Eigner, S. Eresheim, P. Kieseberg, L. D. Klausner, F. Marulli, F. Mercaldo, M. Pirker, T. Priebe, and S. Tjoa
- 10:40–11:00 [Assessing adversarial training effect on IDSs and GANs](#)  
H. Chaitou, T. Robert, J. Leneutre, and L. Pautet
- 11:00–11:20 [Defending against model inversion attack by adversarial examples](#)  
J. Wen, S.-M. Yiu, and L. C. K. Hui

**11:20–11:40 Coffee break**

**CET**

**11.40–13:00 Technical session CSR9**

**CET** Chair: Costas Vassilakis, University of the Peloponnese (GR)

**Room: Athena**

- 11.40–12:00 [Fast dual-field ECDSA accelerator with increased resistance against horizontal SCA attacks](#)  
I. Kabin, D. Klann, Z. Dyka, and P. Langendoerfer
- 12.00–12:20 [On the detection of channel switch announcement attack in 802.11 networks](#)  
C. Louca, A. Peratikou, and S. Stavrou
- 12.20–12:40 [Toward automated threat modeling of edge computing systems](#)  
C. Mazzocca, A. De Benedictis, R. Montanari, and V. Casola
- 12.40–13:00 [A dynamic reconfiguration-based approach to resilient state estimation](#)  
A. Joss, A. Grassbaugh, M. Poshtan, and J. Callenes

**11.40–13:00 Technical session WS-ACTI2**

**CET** Chair: Cagatay Yucel, Bournemouth University (UK)

**Room: Nafsika**

- 11.40–12:00 [Mapping cyber threat intelligence to probabilistic attack graphs](#)  
A. Gylling, M. Ekstedt, Z. Afzal, and P. Eliasson

- 12.00–12:20 [A tree-based machine learning methodology to automatically classify software vulnerabilities](#)  
G. Aivatoglou, M. Anastasiadis, G. Spanos, A. Voulgaridis, K. Votis, and D. Tzovaras
- 12.20–12:40 [Evaluation and enhancement of the actionability of publicly available cyber threat information in digital forensics](#)  
A. Dimitriadis, E. Lontzetidis, and I. Mavridis
- 12.40–13:00 [A workflow and toolchain proposal for analyzing users' perceptions in cyber threat intelligence sharing platforms](#)  
B. Stojkovski and G. Lenzi

**11.40–13:00 Technical session WS-RAI2**

**CET** Chair: Francesco Mercaldo, University of Molise (IT)

**Room: Nefeli**

- 11.40–12:00 [X-BaD: A flexible tool for explanation-based bias detection](#)  
M. Pacini, F. Nesti, A. Biondi, and G. Buttazzo
- 12.00–12:20 [Improving classification trustworthiness in random forests](#)  
S. Marrone, M. S. de Biase, F. Marulli, and L. Verde

**13:00–14:00 Lunch break**

**CET**

**14:00–15:20 Technical session CSR10**

**CET** Chair: Nicholas Kolokotronis, University of the Peloponnese (GR)

**Room: Athena**

- 14:00–14:20 [Systematic and efficient anomaly detection framework using machine learning on public ICS datasets](#)  
B. Millot, J. Francq, and F. Sicard
- 14:20–14:40 [Semi-automatic bug generation using test case negation](#)  
T. Westland, N. Niu, R. Jha, D. Kapp, and T. Kebede
- 14:40–15:00 [STRIDE-AI: An approach to identifying vulnerabilities of machine learning assets](#)  
L. Mauri and E. Damiani
- 15:00–15:20 [Machine learning for threat recognition in critical cyber-physical systems](#)  
P. Perrone, F. Flammini, and R. Setola

**14:00–15:20 Technical session WS-ACTI3**

**CET** Chair: Ioannis Chalkias, Bournemouth University (UK)

**Room: Nafsika**

- 14:00–14:20 [CTI blockchain-based sharing using proof-of-quality consensus algorithm](#)  
D. Chatziamanetoglou and K. Rantos
- 14:20–14:40 [Towards intrusion response intel](#)  
K. Hughes, K. McLaughlin, and S. Sezer
- 14:40–15:00 [Data sanitisation and redaction for cyber threat intelligence sharing platforms](#)  
C. Yucel, I. Chalkias, D. Mallis, D. Cetinkaya, J. Henriksen-Bulmer, and A. Cooper
- 15:00–15:20 [Named entity recognition in cyber threat intelligence using transformer-based models](#)  
P. Evangelatos, C. Iliou, T. Mavropoulos, K. Apostolou, T. Tsikrika, S. Vrochidis, and I. Kompatsiaris

**14:00–15:20 Technical session WS-EPES-SPR1**

**CET** Chair: Panagiotis Sarigiannidis, University of Western Macedonia (GR)

**Room: Nefeli**

- 14:00–14:20 [Welcome from the EPES-SPR workshop chair](#)  
P. Sarigiannidis



- 14:20–14:40 [Enhancing SIEM technology for protecting electrical power and energy sector](#)  
I. Sklavidis, C. Angelidis, R. Babagiannou, and A. Liapis
- 14:40–15:00 [A scalable multi-agent system for black start restoration in low voltage microgrids](#)  
A. Pasiyas, A. Schoinas, A. Drosou, and D. Tzovaras
- 15:00–15:20 [TRUSTY: A solution for threat hunting using data analysis in critical infrastructures](#)  
P. Radoglou-Grammatikis, A. Liatifis, E. Grigoriou, T. Saoulidis, A. Sarigiannidis, and T. Lagkas

**15:20–15:40 Coffee break**  
CET

**15:40–17:20 Technical session CSR11**

**CET** Chair: Emanuele Bellini, University of Campania Vanvitelli (IT)

**Room: Athena**

- 15:40–16:00 [Automated and on-demand cybersecurity certification](#)  
S. Karagiannis, M. Manso, E. Magkos, L. L. Ribeiro, and L. Campos
- 16:00–16:20 [Towards a maritime cyber range training environment](#)  
G. Potamos, A. Peratikou, and S. Stavrou
- 16:20–16:40 [Cyber-range federation and cyber-security games: A gamification scoring model](#)  
J. Diakoumakos, E. Chaskos, N. Kolokotronis, and G. Lepouras
- 16:40–17:00 [Cyber-security training evaluation metrics](#)  
N. Koutsouris, C. Vassilakis, and N. Kolokotronis
- 17:00–17:20 [Open source and commercial capture the flag cyber security learning platforms: A case study](#)  
M. Swann, J. Rose, G. Bendiab, S. Shiaeles, and F. Li

**15:40–17:20 Technical session WS-ACTI4**

**CET** Chair: Dimitrios Mallis, Bournemouth University (UK)

**Room: Nafsika**

- 15:40–16:00 [Towards selecting informative content for cyber threat intelligence](#)  
P. Panagiotou, C. Iliou, K. Apostolou, T. Tsikrika, S. Vrochidis, P. Chatzimisios, and I. Kompatsiaris
- 16:00–16:20 [Trust and quality computation for cyber threat intelligence sharing platforms](#)  
K. B. Mavzer, E. Konieczna, H. Alves, C. Yucel, I. Chalkias, D. Mallis, D. Cetinkaya, and L. Galindo Sanchez
- 16:20–16:40 [Towards automated matching of cyber threat intelligence reports based on cluster analysis in an Internet-of-vehicles environment](#)  
G. E. Raptis, C. Katsini, and C. Alexakos
- 16:40–17:00 [Workshop's closing remarks](#)  
V. Katos

**15:40–17:20 Technical session WS-EPES-SPR2**

**CET** Chair: Thomas Lagkas, International Hellenic University (GR)

**Room: Nefeli**

- 15:40–16:00 [Increasing resilience of power systems using intentional islanding; a comparison of binary genetic algorithm and deep learning based method](#)  
P. Paradell, Y. Spyridis, A. Colet Subirachs, A. Ivanova, J. L. Dominguez – Garcia, A. Sesis, and G. Efstathopoulos
- 16:00–16:20 [Enabling cyber-attack mitigation techniques in a software defined network](#)  
A. Pasiyas, T. Kotsiopoulos, G. Lazaridis, A. Drosou, D. Tzovaras, and P. Sarigiannidis



## Program overview

| Timeslot (CET) | Monday 26th of July |           |          | Tuesday 27th of July |         |        | Wednesday 28th of July |          |              |
|----------------|---------------------|-----------|----------|----------------------|---------|--------|------------------------|----------|--------------|
|                | Athena              | Nafsika   | Nefeli   | Athena               | Nafsika | Nefeli | Athena                 | Nafsika  | Nefeli       |
| 08:40–09:00    | WL                  |           |          |                      |         |        |                        |          |              |
| 09:00–10:00    | PL1                 |           |          | PL2                  |         |        | PL4                    |          |              |
| 10:00–11:20    | CSR1                | WS-DS4CS1 | WS-CRST1 | CSR5                 | WS-CRE1 |        | CSR8                   | WS-ACTI1 | WS-RAI1      |
| 11:20–11:40    | Coffee break        |           |          | Coffee break         |         |        | Coffee break           |          |              |
| 11:40–13:00    | CSR2                | WS-DS4CS2 | WS-CRST2 | CSR6                 |         |        | CSR9                   | WS-ACTI2 | WS-RAI2      |
| 13:00–14:00    | Lunch break         |           |          | Lunch break          |         |        | Lunch break            |          |              |
| 14:00–15:00    | CSR3                | WS-DS4CS3 |          | PL3                  |         |        | CSR10                  | WS-ACTI3 | WS-EPES-SPR1 |
| 15:00–15:20    |                     |           |          |                      |         |        |                        |          |              |
| 15:20–15:40    | Coffee break        |           |          | Coffee break         |         |        | Coffee break           |          |              |
| 15:40–17:20    | CSR4                |           | WS-MCS1  | CSR7                 | WS-CRE2 |        | CSR11                  | WS-ACTI4 | WS-EPES-SPR2 |
| 17:20–17:40    | Coffee break        |           |          | AW                   |         |        |                        |          |              |
| 17:40–18:20    |                     | WS-MCS2   |          |                      |         |        |                        |          |              |
| 18:20–20:00    |                     |           |          |                      | WS-CRE3 |        |                        |          |              |

## Athena room (main conference)

| Timeslot (CET) | Monday 26th of July   | Tuesday 27th of July  | Wednesday 28th of July   |
|----------------|---|---|--|
| 08:40–09:00    | Welcome from the chairs WL  |   |  |
| 09:00–10:00    | Plenary session <b>PL1</b> (Isaac Ben Israel)<br><i>Chair: Emanuele Bellini</i> | Plenary session <b>PL2</b> (Ernesto Damiani)<br><i>Chair: Nicholas Kolokotronis</i> | Plenary session <b>PL4</b> (Steve Furnell)<br><i>Chair: Stavros Shiaeles</i> |
| 10:00–11:20    | Technical session <b>CSR1</b><br><i>Chair: Francesco Flammini</i>               | Technical session <b>CSR5</b><br><i>Chair: Bogdan Ghita</i>                         | Technical session <b>CSR8</b><br><i>Chair: Nicholas Kolokotronis</i>         |
| 11:20–11:40    | Coffee break  | Coffee break  | Coffee break   |
| 11:40–13:00    | Technical session <b>CSR2</b><br><i>Chair: Stefano Marrone</i>                  | Technical session <b>CSR6</b><br><i>Chair: Emanuele Bellini</i>                     | Technical session <b>CSR9</b><br><i>Chair: Costas Vassilakis</i>             |
| 13:00–14:00    | Lunch break   | Lunch break   | Lunch break  |
| 14:00–15:00    | Technical session <b>CSR3</b><br><i>Chair: Nicholas Kolokotronis</i>            | Plenary session <b>PL3</b> (Igor Linkov)<br><i>Chair: Stavros Shiaeles</i>          | Technical session <b>CSR10</b><br><i>Chair: Nicholas Kolokotronis</i>        |
| 15:00–15:20    |   |   |  |
| 15:20–15:40    | Coffee break  | Coffee break  | Coffee break   |
| 15:40–17:20    | Technical session <b>CSR4</b><br><i>Chair: Stavros Shiaeles</i>                 | Technical session <b>CSR7</b><br><i>Chair: Fudong Li</i>                            | Technical session <b>CSR11</b><br><i>Chair: Emanuele Bellini</i>             |
| 17:20–18:20    |   | Awards session <b>AW</b><br><i>Chairs: Emanuele Bellini, Giancarlo Fortino</i>      |  |

## Nafsika room (workshops)

| Timeslot (CET) | Monday 26th of July  | Tuesday 27th of July   | Wednesday 28th of July  |
|----------------|--|--|---|
| 10:00–11:20    | Keynote session <b>WS-DS4CS1</b><br><i>Chair: Christos Tryfonopoulos</i>   | Technical session <b>WS-CRE1</b><br><i>Chair: Nicholas J. Multari</i>                    | Keynote session <b>WS-ACT11</b><br><i>Chair: Vasilis Katos</i>      |
| 11:20–11:40    | Coffee break   |  | Coffee break  |
| 11:40–13:00    | Technical session <b>WS-DS4CS2</b><br><i>Chair: Spiros Skiadopoulos</i>    |  | Technical session <b>WS-ACT12</b><br><i>Chair: Cagatay Yucel</i>    |
| 13:00–14:00    | Lunch break  |  | Lunch break   |
| 14:00–15:20    | Technical session <b>WS-DS4CS3</b><br><i>Chair: Christos Tryfonopoulos</i> |  | Technical session <b>WS-ACT13</b><br><i>Chair: Ioannis Chalkias</i> |
| 15:20–15:40    |  |  | Coffee break  |
| 15:40–17:20    |  | Keynote session <b>WS-CRE2</b><br><i>Chair: Rosalie McQuaid</i>                          | Technical session <b>WS-ACT14</b><br><i>Chair: Dimitrios Mallis</i> |
| 17:20–18:20    |  | Break (awards session in Athena room)  |   |
| 18:20–20:00    |  | Panel discussion <b>WS-CRE3</b><br><i>Chairs: Jeffrey Picciotto, Nicholas J. Multari</i> |   |

## Nefeli room (workshops)

| Timeslot (CET) | Monday 26th of July   | Tuesday 27th of July | Wednesday 28th of July  |
|----------------|---|----------------------|---|
| 10:00–11:20    | Technical session <b>WS-CRST1</b><br><i>Chair: Konstantina-Eleni Davri</i>            |                      | Technical session <b>WS-RAI1</b><br><i>Chair: Fiammetta Marulli</i>             |
| 11:20–11:40    | Coffee break  |                      | Coffee break  |
| 11:40–13:00    | Technical session <b>WS-CRST2</b><br><i>Chair: Angelos Amditis</i>                    |                      | Technical session <b>WS-RAI2</b><br><i>Chair: Francesco Mercaldo</i>            |
| 13:00–14:00    |   |                      | Lunch break   |
| 14:00–15:20    |   |                      | Technical session <b>WS-EPES-SPR1</b><br><i>Chair: Panagiotis Sarigiannidis</i> |
| 15:20–15:40    |   |                      | Coffee break  |
| 15:40–17:20    | Technical session <b>WS-MCS1</b><br><i>Chair: Leandros Maglaras</i>                   |                      | Technical session <b>WS-EPES-SPR2</b><br><i>Chair: Thomas Lagkas</i>            |
| 17:20–17:40    | Coffee break  |                      |   |
| 17:40–18:20    | Panel discussion <b>WS-MCS2</b><br><i>Chairs: Christos Douligeris, Despina Polemi</i> |                      |   |