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. Marnerides, 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. Cegan, 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

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, J. Kuusijärvi, A. Gkaniatsou, E. Latsa, and A. Am ditis

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

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. Tryfonopoulou, and P. Raftopoulou

12.00–12:20 Data exfiltration: Methods and detection countermeasures
J. King, G. Bendib, 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. Ghe ring, E. Karapistoli, N. Gerosavva, and N. Kylilis

12.00–12:20 The THREAT-ARREST cyber ranges platform
12:20–12:40 Cyber security certification programmes

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 Shiales, 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. Ustundag 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
   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
   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
   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
   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. Tzamalis, S.
Nikoletseas, 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 HybridgeCAN, 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 Shiaales, University of Portsmouth (UK)
      Room: Athena
      Invited talk: Actionable and interpretable AI (AI^2) 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

**Keynote session WS-ACTI1**  
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)

**Technical session WS-RAI1**  
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**  

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

**Coffee break**  
CET

**Technical session CSR9**  
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

**Technical session WS-ACTI2**  
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. Dimitriadi, 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. Lenzini

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. Chatzianetoglou 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. Pasias, A. Schoinas, A. Drosou, and D. Tzovaras

15:00–15:20 TRUSTY: A solution for threat hunting using data analysis in critical infrastructures

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

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

16:00–16:20 Enabling cyber-attack mitigation techniques in a software defined network
A. Pasias, T. Kotsiopoulos, G. Lazaridis, A. Drosou, D. Tzovaras, and P. Sarigiannidis
## Program overview

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<td>Athena</td>
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<td>08:40–09:00</td>
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<td>10:00–11:20</td>
<td>CSR1</td>
<td>WS-DS4CS1</td>
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<td>11:40–13:00</td>
<td>CSR2</td>
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<td>15:40–17:20</td>
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<td>18:20–20:00</td>
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### Athena room (main conference)

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<tr>
<td>08:40–09:00</td>
<td>Welcome from the chairs WL</td>
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<tr>
<td>09:00–10:00</td>
<td>Plenary session PL1 (Isaac Ben Israel) Chair: Emanuele Bellini</td>
<td>Plenary session PL2 (Ernesto Damiani) Chair: Nicholas Kolokotronis</td>
<td>Plenary session PL4 (Steve Furnell) Chair: Stavros Shiaeles</td>
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<td>10:00–11:20</td>
<td>Technical session CSR1 Chair: Francesco Flammini</td>
<td>Technical session CSR5 Chair: Bogdan Ghita</td>
<td>Technical session CSR8 Chair: Nicholas Kolokotronis</td>
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<td>11:20–11:40</td>
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<td>11:40–13:00</td>
<td>Technical session CSR2 Chair: Stefano Marrone</td>
<td>Technical session CSR6 Chair: Emanuele Bellini</td>
<td>Technical session CSR9 Chair: Costas Vassilakis</td>
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<td>14:00–15:00</td>
<td>Technical session CSR3 Chair: Nicholas Kolokotronis</td>
<td>Plenary session PL3 (Igor Linkov) Chair: Stavros Shiaeles</td>
<td>Technical session CSR10 Chair: Nicholas Kolokotronis</td>
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<tr>
<td>15:40–17:20</td>
<td>Technical session CSR4 Chair: Stavros Shiaeles</td>
<td>Technical session CSR7 Chair: Fudong Li</td>
<td>Technical session CSR11 Chair: Emanuele Bellini</td>
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<tr>
<td>17:20–18:20</td>
<td>Awards session AW Chairs: Emanuele Bellini, Giancalro Fortino</td>
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</tbody>
</table>
### Nafsika room (workshops)

<table>
<thead>
<tr>
<th>Timeslot (CET)</th>
<th>Monday 26th of July</th>
<th>Tuesday 27th of July</th>
<th>Wednesday 28th of July</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00–11:20</td>
<td>Keynote session <strong>WS-DS4CS1</strong>&lt;br&gt;Chair: Christos Tryfonopoulos</td>
<td>Technical session <strong>WS-CRE1</strong>&lt;br&gt;Chair: Nicholas J. Multari</td>
<td>Keynote session <strong>WS-ACTI1</strong>&lt;br&gt;Chair: Vasilis Katas</td>
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<tr>
<td>11:20–11:40</td>
<td>Coffee break</td>
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<tr>
<td>11:40–13:00</td>
<td>Technical session <strong>WS-DS4CS2</strong>&lt;br&gt;Chair: Spiros Skiadopoulos</td>
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<td>Technical session <strong>WS-ACTI2</strong>&lt;br&gt;Chair: Cagatay Yucel</td>
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<tr>
<td>13:00–14:00</td>
<td>Lunch break</td>
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<tr>
<td>14:00–15:20</td>
<td>Technical session <strong>WS-DS4CS3</strong>&lt;br&gt;Chair: Christos Tryfonopoulos</td>
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<td>Technical session <strong>WS-ACTI3</strong>&lt;br&gt;Chair: Ioannis Chalkias</td>
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<td>15:20–15:40</td>
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<tr>
<td>15:40–17:20</td>
<td>Keynote session <strong>WS-CRE2</strong>&lt;br&gt;Chair: Rosalie McQuaid</td>
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<td>Technical session <strong>WS-ACTI4</strong>&lt;br&gt;Chair: Dimitrios Mallis</td>
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<td>17:20–18:20</td>
<td>Break (awards session in Athena room)</td>
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<td>18:20–20:00</td>
<td>Panel discussion <strong>WS-CRE3</strong>&lt;br&gt;Chairs: Jeffrey Picciotto, Nicholas J. Multari</td>
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### Nefeli room (workshops)

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<tr>
<td>10:00–11:20</td>
<td>Technical session <strong>WS-CRST1</strong>&lt;br&gt;Chair: Konstantina-Eleni Davri</td>
<td>Technical session <strong>WS-RAI1</strong>&lt;br&gt;Chair: Fiammetta Marulli</td>
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<td>11:20–11:40</td>
<td>Coffee break</td>
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<tr>
<td>11:40–13:00</td>
<td>Technical session <strong>WS-CRST2</strong>&lt;br&gt;Chair: Angelos Amditis</td>
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<td>Technical session <strong>WS-RAI2</strong>&lt;br&gt;Chair: Francesco Mercaldo</td>
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<tr>
<td>13:00–14:00</td>
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<td>Lunch break</td>
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<td>14:00–15:20</td>
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<td>Technical session <strong>WS-EPES-SPR1</strong>&lt;br&gt;Chair: Panagiotis Sarigiannidis</td>
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<td>15:20–15:40</td>
<td>Technical session <strong>WS-MCS1</strong>&lt;br&gt;Chair: Leandros Maglaras</td>
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<td>Coffee break</td>
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<td>15:40–17:20</td>
<td>Coffee break</td>
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<td>Technical session <strong>WS-EPES-SPR2</strong>&lt;br&gt;Chair: Thomas Lagkas</td>
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<tr>
<td>17:20–17:40</td>
<td>Panel discussion <strong>WS-MCS2</strong>&lt;br&gt;Chairs: Christos Douligcris, Despina Polemi</td>
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<td>17:40–18:20</td>
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