

# Detailed Program

December 4, 2023

| Time (GMT+1)  | Program       | Room 1  | Room 2  |
|---------------|---------------|---|---|
| 8.00 - 9.15   | Registration  |   |   |
| 9.15 - 9.30   | Welcome       |   |   |
| 9.30 - 10.30  | Paper Session | Bridging the Chasm Between Ideal and Realistic Federated Learning: A Measurements Study - <i>Hend Gedawy, Khaled Harras, Temoor Tanveer and Thang Bui</i>                                       | Depot: Dependency-Eager Platform of Transformations - <i>Kerem Celik, Samridhi Maheshwari, Shereen Elsayed, Markus Mock, Chandra Krintz and Rich Wolski</i>   |
|               |               | SAGE - A Tool for Optimal Deployments in Kubernetes Clusters - <i>Vlad-Ioan Luca and Madalina Erascu</i>  | Experimental analysis of microservices architectures for hosting cloud-based Massive Multiplayer Online Role-Playing Game (MMORPG) - <i>Marlon Schweigert, Diego Oliveira, Charles Miers, Guilherme Koslovski and Mauricio Pillon</i> |
| 10.30 - 11.00 | Coffee Break  |   |   |
| 11.00 - 12.30 | Paper Session | GSLAC: GPU Software Level Access Control for Information Isolation on Cloud Platforms - <i>Chia Chang Li, Po Cheng Wu and Che Rung Lee</i>  | Introducing TinyKVM for High-Performance CDN Edge Services - <i>Alf-Andre Walla and Paal Engelstad</i>  |
|               |               | A Lightweight Routing Layer Using a Reliable Link-Layer Protocol - <i>Qianfeng Shen and Paul Chow</i>   | A Load Balancing Algorithm For Long-Life Green Edge Systems - <i>Roberto Beraldi and Gabriele Proietti Mattia</i>   |
|               |               | MScheduler: Leveraging Spot Instances for High-Performance Reservoir Simulation in the Cloud - <i>Felipe Portella, Paulo Estrela, Renzo Malini, Luan Teylo, Josep Berral and Lúcia Drummond</i> | Energy-Efficient Offloading in Edge Slicing with Non-Linear Power Functions - <i>Jiahe Xu, Jing Fu, Jingjin Wu and Moshe Zukerman</i>   |
| 12.30 - 14.00 | Lunch break   |   |   |

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| 14.00 - 15.30 | Paper Session | Can Software Containerisation Fit The Car OnBoard Systems ? - <i>David Fernandez Blanco, Frédéric Le Mouël, Trista Lin and Amir Rekik</i>   | Energy-Aware Streaming Analytics Job Scheduling for Edge Computing - <i>Demetris Trihinas, Moysis Symeonides, Joanna Georgiou, George Pallis and Marios Dikaiakos</i> |
|               |               | Enhanced Runtime-Adaptable Routing for Serverless Functions based on Performance and Cost Tradeoffs in Hybrid Cloud Settings - <i>Georgios Fatouros, George Kousiouris, Georgios Makridis, John Soldatos, Michael Filippakis and Dimosthenis Kyriazis</i> | Peer-to-Peer Approach for Edge Computing Services - <i>Muhammad Anjum Malik, Stephan Recker and Tobias Pleuger</i>  |
|               |               | PuppetStack: A tool for deploying high-availability private cloud infrastructure - <i>Fabrizio Messina, Miriana Russo, Corrado Santoro, Federico Fausto Santoro and Salvatore Riccobene</i>   | Traditional vs Federated Learning with Deep Autoencoders: a Study in IoT Intrusion Detection - <i>Marta Catillo, Antonio Pecchia and Umberto Villano</i>              |
| 15.30 - 15.50 | Coffee Break  |   |   |
| 15.50 - 17.20 | Tutorial      |   |   |

## December 5, 2023

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|---------------|---------------|---|---|
| 9.30 - 10.30  | Keynote       |   |   |
| 10.30 - 11.00 | Coffee Break  |   |   |
| 11.00 - 12.30 | Paper session | HCoop: A Cooperative and Hybrid Resource Scheduling for Heterogeneous Jobs in Clouds - <i>Jinwei Liu, Rui Gong, Wei Dai, Wei Zheng, Ying Mao and Wei Zhou</i> | A Flexible Trust Manager for Remote Attestation in Heterogeneous Critical Infrastructures - <i>Yu Liu and Aitor Hernandez Herranz</i> |
|               |               | OSμS: An Open-Source Microservice Prototyping   | Lightweight Cloud Application Sandboxing - <i>Marco Abbadini, Michele Beretta, Dario Facchinetti,</i>                                 |

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|               |               | Platform - <i>Lamees Al Qassem, Thanos Stouraitis, Ernesto Damiani and Ibrahim Elfadel</i>  | <i>Gianluca Oldani, Matthew Rossi and Stefano Paraboschi</i>   |
|               |               | Inverse Response Time Ratio Scheduler: Optimizing Throughput and Response Time for Serverless Computing - <i>Mina Morcos and Ibrahim Matta</i>  | Triad: Trusted Timestamps in Untrusted Environments - <i>Gabriel Fernandez, Andrey Brito and Christof Fetzer</i>   |
| 12.30 - 14.00 | Lunch break   |   |  |
| 14.00 - 15.30 | Paper session | Performance analysis of the Raft consensus algorithm on Hyperledger Fabric and Ethereum on cloud - <i>João H. F. Battisti, Vitor E. Batista, Guilherme P. Koslovski, Maurício A. Pillon, Charles C. Miers, Marco A. Marques, Marcos A. Simplicio Jr. and Diego Kreutz</i> | The Flaw Within: Identifying CVSS Score Discrepancies in the NVD - <i>Siqi Zhang, Minjie Cai, Mengyuan Zhang, Lianying Zhao and Xavier de Carné de Carnavalet</i>  |
|               |               | Enabling 5G QoS configuration capabilities for IoT applications on container orchestration platform - <i>Yu Liu and Aitor Hernandez Herranz</i>   | Decentralised Authentication in Microservice Architectures with SSI and DID in Blockchain - <i>Biagio Boi and Christian Esposito</i>                               |
|               |               | Cost-optimized scheduling for Microservices in Kubernetes - <i>Sugunakumar Arunan, Gayashan Amarasinghe and Indika Perera</i>   | Enabling Trusted TEE-as-a-Service Models with Privacy Preserving Automotons - <i>Matt Ficke, Arne Hollum, Giovanni Mazzeo, Bala Subramanyan and Darshan Vaydia</i> |
| 15.30 - 15.50 | Coffee Break  |   |  |
| 15.50 - 17.20 | Paper session | Increasing Robustness of Blockchain Peer-to-Peer Networks with Alternative Peer Initialization - <i>Bernadet Klein Wassink and Zhiming Zhao</i>   | CloudScent: a model for code smell analysis in open-source cloud - <i>Asif Imran, Raj Shah, Sameer Ahmed Mohamed and Tevfik Kosar</i>                              |
|               |               | Decoding NFT Market Dynamics with Data - <i>Smruti Inamdar and Zhiming Zhao</i>   | Recommendation engine for optimal Spark delta tables partitioning - <i>Rui Esteves, Håvard Jacobsen and Ola Flotve</i>   |
|               |               | Flexible and Secure Code Deployment in Federated Learning using Large Language  | Undoing CRDT Operations Automatically - <i>Provakar Mondal and Eli Tilevich</i>  |

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|              |               | Models: Prompt Engineering to Enhance Malicious Code Detection - <i>Jungwon Seo, Nan Zhang and Chunming Rong</i> |  |
|              |               |  | Addressing Serverless Computing Vendor Lock-In through Cloud Service Abstraction - <i>Di Mo, Robert Cordingley, Donald Chinn and Wes Lloyd</i> |
| 19.30        | Social Dinner |  |  |

## December 6, 2023

| Time (GMT+1)  | Program       | Room 1   | Room 2  |
|---------------|---------------|--|---|
| 9.00 - 10.30  | Paper Session | Workshop Keynote   | Enhancing Mobile Privacy and Security: A Face Skin Patch-Based Anti-Spoofing Approach   |
|               |               | Ensuring End-to-End Security in Computing Continuum Exploiting Physical Unclonable Functions - <i>Daniele Lombardi, Mario Barbareschi and Valentina Casola.</i>                        | A Blockchain-based Online Trading Platform: TrustTrade - <i>Guang Yang, Lorena-Alina Alexandru and Marius Storheim</i>                            |
|               |               | An Evaluation of Transformer Models for Early Intrusion Detection - <i>Md Mahbub Islam, Tanwir Ahmad and Dragos Truscan.</i>   | Semi-Automatic PenTest Methodology based on Threat-Model: The IoT Brick Case Study - <i>Gennaro Pio Rimoli, Daniele Granata and Massimo Ficco</i> |
| 10.30 - 11.00 | Coffee Break  |  |   |
| 11.00 - 12.30 | Paper Session | 5G SUCI Catcher: Attack and Detection - <i>Lorens Barraud, Francesco Caccavale, Jean-Baptiste Peyrat, Wissam Mallouli, Véronique Capdevielle, Hicham Khalife and Ana Rosa Cavalli.</i> |   |

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|               |               | Testing techniques to assess impact and cascading effects - <i>Valeria Valdés Ríos, Ana Rosa Cavalli, Fatiha Zaidi and Wissam Mallouli.</i>   |        |
|               |               | Towards trustworthy AI: Security risk assessment methodology for Artificial Intelligence systems - <i>Eider Iturbe, Erkuden Rios and Nerea Toledo.</i>  |        |
|               |               | Towards Smarter Security Orchestration and Automatic Response for CPS and IoT - <i>Phu Nguyen, Rustem Dautov, Hui Song, Angel Rego, Eider Iturbe, Erkuden Rios, Diego Sagasti, Gonzalo Nicolas, Valeria Valdés, Wissam Mallouli, Ana Cavalli and Nicolas Ferry.</i>   |        |
| 12.30 - 14.00 | Lunch break   |   |        |
| 14.00 - 15.30 | Paper Session | Design and Implementation of Web3-Based E-Commerce Cryptocurrency Payment System - <i>Seungseok Lee and Sangjoon Lee.</i>   |        |
|               |               | Surveying Cyber Threat Intelligence and Collaboration: A Concise Analysis of Current Landscape and Trends - Panagiotis Radoglou-Grammatikis, Elisavet Kioseoglou, Dimitrios Asimopoulos, Miltiadis Siavvas, Ioannis Nanos, Thomas Lagkas, Vasileios Argyriou, Konstantinos Psannis, Sotirios Goudos and Panagiotis Sarigiannidis. |        |
|               |               | Detecting Security Requirements in GitHub Issues - <i>Polina Minina, Andrey Sadovykh and Vladimir Ivanov.</i>   |        |
|               |               | Software Bill of Materials in Critical Infrastructure - <i>Lars Andreassen Jaatun, Silje Marie Sørlien, Ravishankar Borgaonkar, Steve Taylor and Martin Gilje Jaatun.</i>   |        |

