


[Submission](#)
[Registration](#)
[Program](#)
[Committees](#)
[Keynote Speakers](#)
[Travel Guide](#)

Publications Online Access

Program

Day One – 12 June 2024

8:45-9:00 **Opening and Welcome**

9:00-10:00 **Keynote Speaker: Prof Basie Von Solms: The Security Genie is out of the bottle – can we force it back?**

10:00-10:30 Coffee Break

10:30-12:35 **Machine Learning in Cybersecurity**

Large Scale Heap Dump Embedding for Machine Learning: Predicting OpenSSH Key Locations – Florian Rascoussier and Clément Lahoche

Can Synthetic Data preserve Manifold properties – Sonakshi Garg and Vicenc Torra

Predicting the execution time of secure neural network inference – Eloise Zhang and Zoltan Adam Mann

11:45-12:45 Lunch Break

12:45-14:25 **Cryptography and Distributed Ledger Technology**

Bruteware: A novel family of cryptoviral attacks – Valerio Coletti, Emil Müller, Frederik Meyer Lehmann Lundsberg and Nicola Dragoni

Xproofs: New Aggregatable and Maintainable Matrix Commitment with Optimal Proof Size – Xinwei Yong, Jiaojiao Wu and Jianfeng Wang

IPEQ: Querying Multi-Attribute Records with Inner Product Encryption – Marin Matsumoto, Tsubasa Takahashi and Masato Oguchi

Transforming EU Governance: The Digital Integration through EBSI and GLASS – Dimitrios Kasimatis, William J Buchanan, Mwarwan Abubakar, Owen Lo, Christos Chrysoulas, Nikolaos Pitropakis, Pavlos Papadopoulos, Sarwar Sayeed and Marc Sel

14:25-14:55 Coffee Break

14:55-17:00 **Attacks and their detection I**

Session Replication Attack through QR Code Sniffing in Passkey CTAP Registration – Donghyun Kim, Seungmin Kim, Gwonsang Ryu and Daeseon Choi

Rasd: Semantic Shift Detection and Adaptation for Multi-Classification NIDS – Fahad Alotaibi and Sergio Maffeis

Neurosymbolic learning in the XAI framework for enhanced cyberattack detection with expert knowledge integration – Chathuranga Sampath Kalutharage, Xiaodong Liu, Christos Chrysoulas and Oluwaseun Bamgboye

Cross-validation for Detecting Label Poisoning Attacks on Machine Learning Algorithms – Tharindu Lakshan Yasarathna, Lankeshwara Munasinghe, Harsha Kalutarage and Nhien An Le Khac

Detecting Web Bots via Keystroke Dynamics – August See, Adrian Westphal, Cornelius Weber and Mathias Fischer

Day Two – 13 June 2024

09:00-10:00 **Keynote Speaker – Prof Costas Lambrinoudakis: Exploring Evidentiary Data within OpenAI’s ChatGPT for Digital Forensics**

10:00-10:30 Coffee Break

10:30-12:10 **Privacy**

“Alexa, How Do You Protect My Privacy?” A Quantitative Study of User Preferences and Requirements about Smart Speaker Privacy Setting – Luca Hernández Acosta and Delphine Reinhardt

Hiding Your Awful Online Choices Made More Efficient and Secure: A New Privacy-Aware Recommender System – Shibam Mukherjee, Roman Walch, Fredrik Meisingseth, Elisabeth Lex and Christian Rechberger

PRIDA: PRIVacy-preserving Data Aggregation with multiple data customers – Beyza Bozdemir, Betül Aşkın Özdemir and Melek Önen

Reduce to the MACs – Privacy Friendly Generic Probe Requests – Johanna Ansohn McDougall, Alessandro Brighente, Anne Kunstmann, Niklas Zapatka and Hannes Federrath

12:10-13:10 Lunch Break

13:10-15:15 **Attacks and Their Detection II**

Satellite: Effective and Efficient Stack Memory Protection Scheme for Unsafe Programming Languages – Hongjoo Jin, Sumin Yang, Moon Chan Park, Haehyun Cho and Dong Hoon Lee

GAD: A Real-time Gait Anomaly Detection System with Online Adaptive Learning – Ming-Chang Lee, Jia-Chun Lin and Sokratis Katsikas

DryJIN: Detecting Information Leaks in Android Applications – Minseong Choi, Yubin Im, Steve Ko, Yonghwi Kwon, Yuseok Jeon and Haehyun Cho

A Structural-Semantic Approach Integrating Graph-based and Large Language Models Representation to Detect Android Malware – Irshad Khan and Young-Woo Kwo

Malicious Insider Threat Detection Using Sentiment Analysis Of Social Media Topics – Matt Kenny, Nikolaos Pitropakis, Sarwar Sayeed, Christos Chrysoulas and Alexios Mylonas

15:15-15:45 Coffee Break

15:45-17:25 **Authentication Authorisation and Access Control**

Examining the Strength of Three Word Passwords – William Fraser, Matthew Broadbent, Nikolaos Pitropakis and Christos Chrysoulas

Putting Authorization Servers on User-owned Devices in User-Managed Access – Masato Hirai, Daisuke Kotani and Yasuo Okabe

Cognition Behind Access Control: A Usability Comparison of Rule- and Category-based Mechanisms – Denis Obrezkov

Queuing Theoretic Analysis of Dynamic Attribute-based Access Control Systems – Gaurav Madkaikar, Shamik Sural, Jaideep Vaidya and Vijay Atluri

18:30 Social Dinner

Day Three – 14 June 2024

09:00-10:00 **Keynote Speaker: Siân John MBE: Net Zero and AI / Cybersecurity. Considering the environmental challenge of analytics**

10:00-10:30 Coffee Break

10:30-12:35 Threats and Vulnerabilities

Keep your memory dump shut: Unveiling data leaks in password managers – Efstratios Chatzoglou, Vyron Kampourakis, Zisis Tsiatsikas, Georgios Karopoulos and Georgios Kambourakis

Obfuscating Code Vulnerabilities against Static Analysis in Android Apps – Francesco Pagano, Luca Verderame and Alessio Merlo

Exploring a Low-Cost Hardware Reverse Engineering Approach: A Use Case Experiment – André Waltoft-Olsen, Phillip Johnson, Lasse Øverlier and Geir Olav Dyrkolbotn

Identification of cyber threats and vulnerabilities in Norwegian distribution networks – Martin Gilje Jaatun, Jørn Foros and Maren Istad

Multi-Method Approach to Human Expertise, Automation, and Artificial Intelligence for Vulnerability Management – Mehdi Saadallah, Abbas Shahim and Svetlana Khapova

12:35-13:35 Lunch Break**13:35-15:15 Trust and Trusted Computing**

Towards Practical Hardware Fingerprinting for Remote Attestation – Michael Eckel, Florian Fenzl and Lukas Jäger

LightArmor: A Lightweight Trusted Operating System Isolation Approach for Mobile Systems – Nan Jiang, Qihang Zhou, Xiaoqi Jia, Jiayun Chen, Qingjia Huang and Haichao Du

Towards a Mobility-Aware Trust Model for the Internet of Underwater Things – Abeer Almutairi, Xavier Carpent and Steven Furnell

Chain of trust: Unraveling the references among Common Criteria certified products – Adam Janovský, Lukasz Chmielewski, Petr Svenda, Ján Jančár and Vashek Matyas

15:15-15:30 Closing

Organiser

Edinburgh Napier University



Co-Organiser

Norwegian Institute of Science and Technology



Co-Organiser

Abertay University



Support

International Federation for Information Processing