Day 1 July 11, 2023 (Melbourne, GMT+10)

09:00 – 10:00 Registration

10:00 – 10:30 Coffee break

11:00 – 11:10 Welcome from General Chairs and PC Chairs

11:10 – 12:00 Keynote Speech: Moti Yung

12:00 – 13:00 Lunch Break

13:00 – 14:20 Session 1 Network and System Security
ACDroid: Detecting Collusion Applications on Smart Devices
Ning Xi, Yihuan He, Yuchen Zhang, Zhi Wang and Pengbin Feng

DomainIsolation: Lightweight Intra-enclave Isolation for Confidential Virtual Machines
Wenwen Ruan, Wenhao Wang, Shuang Liu, Ran Duan and Shoumeng Yan

Keeping Your Enemies Closer: Shedding Light on the Attacker's Optimal Strategy
Weixia Cai, Huashan Chen and Feng Liu

Cyber Attacks against Enterprise Networks: Characterization, Modelling and Forecasting
Zheyuan Sun, Maochao Xu, Kristin Schweitzer, Raymond Bateman, Alexander Kott and Shouhuai Xu

14:20 - 15:00 Coffee break

15:00 – 17:00 Session 2 Cryptography and Authentication
MCVDSSE: Secure Multi-Client Verifiable Dynamic Symmetric Searchable Encryption [Short]
Jinyang Li, Zhenfu Cao, Jiachen Shen and Xiaolei Dong

A Graphical Password Scheme based on Rounded Image Selection
Xinyuan Qin and Wenjuan Li

Implementation of the Elliptic Curve Method
Xiuxiu Li, Wei Yu and Kunpeng Wang

Almost Injective and Invertible Encodings for Jacobi Quartic Curves
Xiuxiu Li, Wei Yu, Kunpeng Wang and Luying Li

SeeStar: an Efficient Starlink Asset Detection Framework
Linkang Zhang, Yunyang Qin, Yujia Zhu, Yifei Cheng, Zhen Jie and Qingyun Liu

Privacy-enhanced Anonymous and Deniable Post-Quantum X3DH
Kaiming Chen, Atsuko Miyaji and Yuntao Wang

17:00 – 17:10 Awards Ceremony

18:00 – 20:00 Welcome Reception (No. 1 Delicious)

Day 2 July 12, 2023 (Melbourne, GMT+10)

09:00 – 10:00 Session 3 AI for Security
Fractional Dynamic: Analysis for Network Malware Propagation
Haowei Chen and Kaiqi Xiong

Enhancing the Anti-steganalysis Ability via Multiple Adversarial Network
Bin Ma, Kun Li, Jian Xu, Chunpeng Wang, Jian Li and Liwei Zhang

An Empirical study of AI model's Performance for Electricity Load Forecasting with Extreme
Weather Conditions [Short]
Fusen Guo, Jianzhang Wu and Lei Pan

10:00 – 10:30 Coffee break

10:30 - 11:50 Session 4 Threat Detection and Analysis
AST2Vec: A Robust Neural Code Representation for Malicious PowerShell Detection
*Han Miao, Huaifeng Bao, Zixian Tang, Wenhao Li, Wen Wang, Huashan Chen, Feng Liu and
Yanhui Sun*

Real-time Aggregation for Massive alerts based on Dynamic Attack Granularity Graph
Haiping Wang, Binbin Li, Tianning Zang, Yifei Yang, Zisen Qi, Siyu Jia and Yu Ding

Decompilation Based Deep Binary-Source Function Matching
Xiaowei Wang, Zimu Yuan, Yang Xiao, Liyan Wang, Yican Yao, Haiming Chen and Wei Huo

Event-based Threat Intelligence Ontology Model
Wang Peng, Dai Guangxiang and Zhai Lidong

12:00 – 13:00 Lunch Break

13:00 – 14:20 Session 5 Web and Privacy Security
Optimally Blending Honeypots into Production Networks: Hardness and Algorithms
*Md Mahabub Uz Zaman, Liangde Tao, Mark Maldonado, Chang Liu, Ahmed Sunny, Shouhuai
Xu and Lin Chen*

WebMea: A Google Chrome Extension for Web Security and Privacy Measurement Studies
[Short]
Mengxia Ren, Joshua Josey and Chuan Yue

Quantifying Psychological Sophistication of Malicious Emails [Short]
*Rosana Montanez Rodriguez, Theodore Longtchi, Kora Gwartney, Ekzhin Ear, David Azari,
Christopher Kelly and Shouhuai Xu*

SVFL: Secure Vertical Federated Learning on Linear Models [Short]
Kaifeng Luo, Zhenfu Cao, Jiachen Shen and Xiaolei Dong

14:20 – 15:00 Coffee Break

*15:00 – 16:00 Business Meeting (**All are welcomed!**)*

16:00 – 17:00 Invited Talk – Kaitai Liang

17:00 – 17:50 Session 6: Cryptography and Authentication II
Multiprime Strategies for Serial Evaluation of eSIDH-Like Isogenies
Jason LeGrow, Brian Koziel and Reza Azarderakhsh

Adaptively Secure Constrained Verifiable Random Function
Yao Zan, Hongda Li and Haixia Xu

A Robust Reversible Data Hiding Algorithm Based on Polar Harmonic Fourier Moments [Short]
Bin Ma, Zhongquan Tao, Jian Xu, Chunpeng Wang, Jian Li and Liwei Zhang

18:30 – 20:30 Banquet (Secret Kitchen)

Day 3 July 13, 2023 (Melbourne, GMT+10)

09:00 - 9:50 Keynote Speech – Allen Au

10:00 - 10:30 Coffee Break

10:30 - 11:50 Session 7: Advanced Threat Detection Techniques and Blockchain
VaultBox: Enhancing the Security and Effectiveness of Security Analytics
Devharsh Trivedi and Nikos Triandopoulos

Two-stage Anomaly Detection in LEO Satellite Network
Yipeng Wang, Peixian Chen, Shan Ai, Weipeng Liang, Binjie Liao, Weichuan Mo and Heng Wang

Hydra: An Efficient Asynchronous DAG-based BFT Protocol
Zhuo An, Mingsheng Wang, Dongdong Liu, Taotao Li and Qiang Lai

Redactable Blockchain in the Permissioned Setting
Chunying Peng, Haixia Xu, Huimei Liao, Jinling Tang and Tao Tang

12:00 – 13:00 Lunch Break

13:00 - 14:00 Workshop Session

A MULTI-LEVEL Sorting Prediction Enhancement-based two-dimensional Reversible Data Hiding Algorithm for Jpeg Images
Bin Ma, Songkun Wang, Jian Xu, Chunpeng Wang, Jian Li and Xiaolong Li

Research on Encrypted Malicious 5G Access Network Traffic identification based on Deep Learning
Zongning Gao and Shunliang Zhang

A Design of Network Attack Detection Using Causal and Non-causal Temporal Convolutional
Pengju He, Yaokai Feng, Haibo Zhang and Kouichi Sakurai

15:00 – 15:30 Coffee Break and End of Conference