

# CSS 2021

13th International Symposium on Cyberspace Safety and Security  
Copenhagen, Denmark (Online) | 9-11 November 2021

## Program

Day1 (09 November 2021)	
10:00-10:15	Welcome
10:15-11:00	Keynote I
11:00-11:10	Short Break
11:10-12:10	Session I
12:10-13:00	Lunch Break
13:00-13:45	Keynote II
13:50-14:50	Session II
14:50-15:00	Short Break
15:00-16:00	Session III
16:00-16:45	Keynote III

Day2 (10 November 2021)	
09:30-10:15	Keynote IV
10:15-11:00	Keynote V
11:00-11:10	Short Break
11:10-12:10	Session IV
12:10-13:45	Lunch Break
13:45-14:30	Keynote IV
14:30-14:40	Short Break
14:40-15:20	Session V
15:20-15:30	Closing Remarks

Day3 (11 November 2021)	
No Event	

## **Day 1 (09 November 2021, CET Time)**

**10:00-10:15**

**Welcome Session** (Session Chair: Weizhi Meng, DTU)

PC/General Chairs

**10:15-11:00**

**Keynote I** (Session Chair: Weizhi Meng, DTU)

[Title: Em-Curve25519: Faster and Smaller](#)

Zhe Liu, Nanjing University of Aeronautics and Astronautics, China

**11:00-11:10**

Short Break

**11:10-12:10**

**Session: Security I** (Session Chair: Leo Zhang, Deakin University)

- **Encrypted Malicious Traffic Detection Based on Ensemble Learning**

*Fengrui Xiao, Feng Yang, Shuangwu Chen and Jian Yang.*

- **A Federated Learning Assisted Conditional Privacy Preserving Scheme for Vehicle Networks**

*Zhe Xia, Yifeng Shu, Hua Shen and Mingwu Zhang*

- **Dissecting Membership Inference Risk in Machine Learning**

*Navoda Senavirathne and Vicenc Torra*

**12:10-13:00**

Lunch Break

**13:00-13:45**

**Keynote II** (Session Chair: Mauro Conti, University of Padua)

[Title: The Quest for Industrial Host Security](#)

Nils Ole Tippenhauer, CISPA Helmholtz Center for Information Security, Germany

**13:50-14:50**

**Session II** (Session Chair: Jinguang Han, Nanjing University of Finance and Economics)

● **Webshell Detection Based on Explicit Duration Recurrent Network**

*Bailin Xie and Qi Li*

● **A Practical Botnet Traffic Detection System using GNN**

*Bonan Zhang, Jingjin Li, Chao Chen, Kyungmi Lee and Ickjai Lee*

● **Vulnerability and Transaction behavior based detection of Malicious Smart Contracts**

*Rachit Agarwal, Tanmay Thapliyal and Sandeep Shukla*

**14:50-15:00**

Short Break

**15:00-16:00**

**Session III** (Session Chair: Wei-Yang Chiu, DTU)

● **A novel method of template protection and two-factor authentication protocol based on biometric and PUF**

*Hui Zhang, Weixin Bian, Biao Jie and Shuwan Sun*

● **Realizing Information Flow Control in ABAC Mining**

*Radhika B S and R K Shyamasundar*

● **Weak Password Scanning System for Penetration Testing**

*Bailin Xie, Qi Li and Hao Qian*

**16:00-16:45**

**Keynote III** (Session Chair: Weizhi Meng, DTU)

[Title: Cyber-Physical-Social Systems: Design, Analytics, Security and Privacy](#)

Laurence T. Yang, St Francis Xavier University, Canada

## Day 2 (10 November 2021, CET Time)

09:30-10:15

Keynote IV (Session Chair: Weizhi Meng, DTU)

[Title: Achieving Efficient and Privacy-Preserving Dynamic Skyline Query in Online Medical Diagnosis](#)

Rongxing Lu, University of New Brunswick, Canada

10:15-11:00

Keynote V (Session Chair: Weizhi Meng, DTU)

[Title: Artificial Intelligence for Biometric Technologies and Systems](#)

Vincenzo Piuri, Universita' degli Studi di Milano, Italy

11:00-11:10

Short Break

11:10-12:10

Session IV (Session Chair: Zhe Xia, Wuhan University of Technology)

- [Environmental Adaptive Privacy Preserving Contact Tracing System for Respiratory Infectious Diseases](#)

*Pengfei Wang, Xiangyu Su, Maxim Jourenko, Zixian Jiang, Mario Larangeira and Keisuke Tanaka*

- [A Privacy-Preserving Logistics Information System with Traceability](#)

*Quanru Chen, Jinguang Han, Jiguo Li, Liqun Chen and Song Li*

- [Post-quantum Key Escrow for Supervised Secret Data Sharing on Consortium Blockchain](#)

*Xiaowen Cai, Wenjing Cheng, Minghui Zhang, Chen Qian, Zhengwei Ren, Shiwei Xu and Jianying Zhou*

12:15-13:45

Lunch Break

**13:45-14:30**

**Keynote VI** (Session Chair: Mauro Conti, University of Padua)

**Title: What do i Trust? Securing Critical Infrastructure in Cyber War**

Jianying Zhou, SUTD, Singapore

**14:30-14:40**

**Short Break**

**14:40-15:20**

**Session V** (Session Chair: Wei-Yang Chiu, DTU)

- **Flexible and Survivable Single Sign-On**

*Federico Magnanini, Luca Ferretti and Michele Colajanni*

- **The Analysis and Implication of Data Deduplication in Digital Forensics**

*Izabela Savic and Xiaodong Lin*

**15:20-15:30**

**Closing Remarks** (Session Chair: Weizhi Meng, DTU)