

SocialSec2020 Conference Program

Saturday, September 26, 2020

09:00–09:10 Opening

09:10–10:00 Keynote 1:

成秀珍: 基于机器学习的轻量级智能系统安全研究

10:00–10:50 Keynote 2:

王晓峰: Confidential Computing: Challenges Today and Opportunities Tomorrow

10:50–11:40 Keynote 3:

陈海波: 软硬件协同的系统安全增强技术研究

11:40–14:00 Free Activities

14:00–14:50 Keynote 4:

仲盛: 区块链及其应用

14:50–15:40 Keynote 5:

任奎: 加密数据库的前沿与展望

15:40–16:30 Keynote 6:

林学民: Towards Efficient Computation of Network Structural Stability

Sunday, September 27, 2020

09:00–09:50 Keynote:

王凌宇: Cloud Security Auditing

09:50–12:00 Session 1 (Tencent Meeting ID: **209 287 169**)

Session Chair: **Zhi Wang**

09:50–10:00 *Yunru Zhang, Min Luo, Kim-Kwang Raymond Choo, Li Li and Debiao He*: Efficient and Secure Two-Party Distributed Signing Protocol for the GOST Signature Algorithm

10:00–10:10 *Zishuai Cheng, Baojiang Cui and Junsong Fu*: A Novel Web Anomaly Detection Approach based on Semantic Structure

10:10–10:20 *Zhiqiang Wang, Shuhao Li, Bingyan Wang and Xiaorui Ren*: Deep Network-based URL Detection Technology

10:20–10:30 *Shanshan Zhu, Kai Fan and Xingmiao Wang*: A Secure Ultra-lightweight

Authentication Scheme for the Cloud-based IoT Systems

10:30-10:40 *Ke Yuan, Yahui Wang, Wenlei Ouyang, Zheng Li and Yingming Zeng*: Security-Enhanced Timed-Release Encryption Based on Random Oracle Model

10:40-10:50 *Xiaowei Peng, Hequn Xian and Xiuqing Lu*: Generating Adversarial Malware Examples with API Semantics-Awareness for Black-Box Attacks

10:50-11:00 *Zhang Pan, Lai Fenggang, Du Jing, Ying Zhangchi, Kong Rui, Zhou Yi and Yu Xiao*: An Elastic Data Processing Method Based on Data Middle Platform

11:00-11:10 *Jinyin Chen, Dunjie Zhang and Xiang Lin*: Adaptive Adversarial Attack on Graph Embedding via GAN

11:10-11:20 *Shengxu Xie, Changyou Xing, Guomin Zhang, Xianglin Wei and Guyu Hu*: Research on LDoS Attack Detection and Defense Mechanism in Software Defined Networks

11:20-11:30 *Luming Yang, Shaojing Fu and Yuchuan Luo*: Unsupervised Analysis of Encrypted Video Traffic Based on Levenshtein Distance

11:30-11:40 *Junfeng Tian and Ruifang Guo*: An Efficient and Revocable Auditing Scheme for the Internet of Things

11:40-11:50 *Shuoru Wang and Wenjia Niu*: A Configurable off-policy Evaluation with Key State-based Bias Constraints in AI Reinforcement Learning

11:50-12:00 *Umair Khadam, Muhammad Munwar Iqbal, Leonardo Mostarda and Farhan Ullah*: An Efficient Framework for Text Document Security and Privacy

09:50-12:30 Session 2 (Tencent Meeting ID: **209 287 169**)

Session Chair: **Ming Su**

09:50-10:00 *Qian Sun, Xiaoyi Wang, Ning Cao, Jiping Xu, Huiyan Zhang, Li Wang, Jiabin Yu and Gongxue Cheng*: Optimal Deployment of Water Quality Sensor Networks

10:00-10:10 *Jingwen Lu, Peng Tang, Weidong Qiu and Jie Guo*: Effectiveness Analysis of Traditional Chinese Medicine for Anti-Alzheimer's Disease Based on Machine Learning

10:10-10:20 *Yanan Zhang, Chao Ma, Dong Wang, Tianyu Liu and Zhi Wu*: A New Methodology of Fake Cell Test Based on the Radio Resource Control Layer Redirection or Cell Reselection Priorities From the 5G New Radio Network

10:20-10:30 *Ming Yan, Bo Zhang, Gang Zhao, Xiaohui Kuang and Lu Liu*: An Intelligent File Transfer Optimization for Poor Network Conditions

10:30-10:40 *Shuo Feng, Yu-an Tan, Gang Zhao, Xiaohui Kuang and Xiao Yu*: A VirtualXposed-based Inline Hooking Framework for Android Native Methods

10:40-10:50 *Xueming Qiao, Meng Chen, Xiangkun Zhang, Weiyi Zhu, Yanhong Liu, Zhixin Huo, Ruiqi Sun and Dongjie Zhu*: A Two-Fitness Resource Scheduling Strategy Based on Improved Particle Swarm Optimization

10:50-11:00 *Jing Tian*: Task Allocation Mechanism Based on Reputation in MCSN

11:00-11:10 *Hao Peng, Can Liu, Dandan Zhao, Zhaolong Hu, Jianmin Han and Jianfeng Lu*: Reliability Analysis of Heterogeneous CPS under Different Swapping Inter-links Strategies

11:10-11:20 *Yifei He, Jiqiang Liu, Endong Tong, Wenjia Niu, Xinyu Huang, Liang Chang, Qi Alfred Chen and Gang Li*: Adapt Swarm Path Planning for UAV Based on Artificial Potential Field with Birds Intelligence

11:20-11:30 *Wei Wei, Jin Yang, Si Kai Wang, Deng Chen, Yanduo Zhang, Zihang Zhang, Wei Liu, Gonghao Duan, Zhaohui Zheng, Jianping Ju and Jianyin Tang*: Automatic Counting of Railway Tools Based on Deep Learning

11:30-11:40 *Hao Peng, Zhe Kan, Dandan Zhao, Jianmin Han and Zhaolong Hu*: Risk Assessment of Heterogeneous CPS Systems under Different Proportions of Links

11:40-11:50 *Sharmin Akter Milu and Arshadur Nabi*: Dynamic Trade Flow of Selected Commodities Using Global Entropy

11:50-12:00 *Sheikh Shahparan Mahtab*: An Automated Bengali Text Summarization System Using Lexicon Based Approach

12:00-12:10 *Jiangpeng Shi, Xiaochun Cheng and Jianfeng Wang*: Pair-wise Convolution Network with Transformers for Sequential Recommendation

12:10-12:20 *Ying Ma, Kaiyong Li and Jiayu Hou*: Automatic Classification Analysis of Tibetan Folk Music Based on Adaboost Algorithm

12:20-12:30 *Yi Lv*: Forward Calculation for Improving the Sensitivity of Multiple Perturbations in Magnetic Induction Tomography Based on Brain Tissue Structure

09:50-12:20 Session 3 (Tencent Meeting ID: **209 287 169**)

Session Chair: **Tong Li**

09:50-10:00 *Lianfang Wang, Ye Wang, Gang Zhao, Lu Liu and Xiaohui Kuang*: Keeping Privacy Data Secure under Factory Recovery

10:00-10:10 *Jianping Yu, Gang Zhao, Xiaohui Kuang and Lu Liu*: A real-time audio and video streaming transmission scheme for social media

10:10-10:20 *Chaogang Tang, Xianglin Wei, Haifeng Jiang, Huaming Wu, Qing Li and Chong Liu*: UAV-enabled Social Internet of Vehicles: Roles, Security Issues and Use Case

10:20-10:30 *Feras Al-Obeidat, Anoud Bani-Hani, Oluwasegun Adedugbe, Munir Majdalawieh and Elhadj Benkhelifa*: The Socio-Economic Impacts of Social Media Privacy and Security Challenges

10:30-10:40 *Kai Yang, Ling Pang, Bo Zhang, Gang Zhao, Xiaohui Kuang and Weitao Zhang*: An Android Data Protection Scheme for System-as-root Architectures

10:40-10:50 *Tianchu Hang, Yang Bai and Guishi Deng*: A Method for Community Partition Based on Information Granularity

10:50-11:00 *Nan Jia, Shaojing Fu and Ming Xu*: Privacy-preserving nonlinear SVM Classifier Training based on Blockchain

11:00-11:10 *Quanyu Zhao, Fengqian Zhang and Yuan Zhang*: A Novel Defending Scheme for Graph-based Classification against Graph Structure Manipulating Attack

11:10-11:20 *Peng Li, Fucai Zhou, Zifeng Xu, Yuxi Li and Jian Xu*: Privacy-preserving Graph Operations for Social Network Analysis

11:20-11:30 *Min Li, Yue Guo, Yun Guo and Yingming Zeng*: The Movie Recommendation System Based On Differential Privacy

11:30-11:40 *Ittipon Rassameeroj and Felix Wu*: Fake News Propagator Behavior in Social Media Public Communities

11:40-11:50 *Xinxin Zhang, Li Xu and Min Gao*: An Efficient Influence Maximization Algorithm Based on Social Relationship Priority in Mobile Social Networks

11:50-12:00 *Zhifei Wang, Gang Xu, Liqiang He, Zhihan Qi and Fengqi Wei*: Key Nodes Recognition in Opportunistic Network

12:00-12:10 *Bo Song, Zhengjun Jing, Y. Jay Guo, Ren Ping Liu and Qian Zhou*: A novel Measure to Quantify the Robustness of Social Network under The Virus Attacks

12:10-12:20 *Tianchu Hang, Yang Bai and Guishi Deng*: A Method for Community Partition Based on Information Granularity