

2023 IEEE 22nd International Conference on Trust, Security and Privacy in Computing and Communications (TrustCom 2023)

**Exeter, United Kingdom
1 – 3 November 2023**

Pages 1-703



**IEEE Catalog Number: CFP23TRU-POD
ISBN: 979-8-3503-8200-6**

**Copyright © 2023 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP23TRU-POD
ISBN (Print-On-Demand):	979-8-3503-8200-6
ISBN (Online):	979-8-3503-8199-3
ISSN:	2324-898X

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

2023 IEEE 22nd International Conference on Trust, Security and Privacy in Computing and Communications (TrustCom) **TrustCom 2023**

Table of Contents

Message from the TrustCom 2023 General Chairs	lix
Message from the TrustCom 2023 Program Chairs	lx
Message from the BigDataSE 2023 General Chairs	lxi
Message from the BigDataSE 2023 Program Chairs	lxii
Message from the CSE 2023 General Chairs	lxiii
Message from the CSE 2023 Program Chairs	lxiv
Message from the EUC 2023 General Chairs	lxv
Message from the EUC 2023 Program Chairs	lxvi
Message from the iSCI 2023 General Chairs	lxvii
Message from the iSCI 2023 Program Chairs	lxviii
Message from the IUCC 2023 Steering Chairs	lxix
Message from the CIT 2023 Steering Chairs	lxx
Message from the DSCI 2023 Steering Chairs	lxxi
Message from the SmartCNS 2023 Steering Chairs	lxxii
TrustCom 2023 Organizing and Program Committees	lxxiii
BigDataSE 2023 Organizing and Program Committees	lxxix
CSE 2023 Organizing and Program Committees	lxxxi
EUC 2023 Organizing and Program Committees	lxxxiii
iSCI 2023 Organizing and Program Committees	lxxxv

The 22nd IEEE International Conference on Trust, Security and Privacy in Computing and Communications (TrustCom-2023)

Session TrustCom_01: Trustworthy and Secure AI (I)

Representation-Enhanced APT Detection using Contrastive Learning	1
<i>Fengxi Zhou (University of Chinese Academy of Sciences, China),</i>	
<i>Baoming Chang (University of Chinese Academy of Sciences, China), Yu</i>	
<i>Wen (Chinese Academy of Sciences, China), and Dan Meng (Chinese</i>	
<i>Academy of Sciences, China)</i>	

APM: An Attack Path-Based Method for APT Attack Detection on Few-Shot Learning	10
<i>Jiacheng Li (Beijing University of Technology, China), Tong Li (Beijing University of Technology, China), Runzi Zhang (NSFOCUS Technologies Group Co., Ltd., China), Di Wu (Beijing University of Technology, China), Hao Yue (Beijing University of Technology, China), and Zhen Yang (Beijing University of Technology, China)</i>	
Class-Targeted Poisoning Attacks Against DNNs	20
<i>Jian Chen (Huazhong University of Science and Technology, China), Jingyao Wu (Huazhong University of Science and Technology, China), Hao Yin (Tsinghua University, China), Qiang Li (Huazhong University of Science and Technology, China), Wensheng Zhang (Shandong University, China), and Chen Wang (Huazhong University of Science and Technology, China)</i>	
EzBoost: Fast And Secure Vertical Federated Tree Boosting Framework via EzPC	28
<i>Xinwen Gao (National University of Defense Technology, Changsha, China), Shaojing Fu (National University of Defense Technology, Changsha, China), Lin Liu (National University of Defense Technology, Changsha, China), Yuchuan Luo (National University of Defense Technology, Changsha, China), and Luming Yang (National University of Defense Technology, Changsha, China)</i>	
Neighborhood Matching Entity Alignment Model for Vulnerability Knowledge Graphs	38
<i>Qi Yan (Guangzhou University, China), Mohan Li (Guangzhou University, China), and Yanbin Sun (Guangzhou University, China)</i>	
The Dynamic Paradox: How Layer-Skipping DNNs Amplify Cache Side-Channel Leakages	46
<i>Jinze She (SKLOIS, Institute of Information Engineering, China; University of Chinese Academy of Sciences, China), Wenhao Wang (SKLOIS, Institute of Information Engineering, China; University of Chinese Academy of Sciences, China), and Zihao Wang (Indiana University Bloomington, USA)</i>	

Session TrustCom_02: Trustworthy and Secure AI (II)

Advanced Machine-Learning Technologies for Coronary Artery Disease Prediction using Heterogeneous Data	54
<i>Malak Alqulaity (University of Sheffield) and Po Yang (University of Sheffield)</i>	
Learning in the Dark: Privacy-Preserving Machine Learning using Function Approximation	62
<i>Tanveer Khan (Tampere University, Finland) and Antonis Michalas (Tampere University, Finland)</i>	
Undermining License Plate Recognition: A Data Poisoning Attack	72
<i>Bo Song (Shandong University, China), Yunpeng Yi (Shandong University, China), Ting Zhou (Shandong University, China), Junfeng Yang (Beijing Aerospace Automatic Control Institute, China), and Lei Liu (Shandong University, China; Shandong Research Institute of Industrial Technology, China)</i>	
Reducing Model Memorization to Mitigate Membership Inference Attacks	79
<i>Mehrdad Sheikhhajeri (University of Windsor, Canada) and Dima Alhadidi (University of Windsor, Canada)</i>	

Towards Dynamic Backdoor Attacks Against LiDAR Semantic Segmentation in Autonomous Driving. 89

Shuai Li (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Yu Wen (Institute of Information Engineering, Chinese Academy of Sciences, China), and Xu Cheng (Peking University, China)

BadLiDet: A Simple Backdoor Attack against LiDAR Object Detection in Autonomous Driving 99
Shuai Li (Institute of Information Engineering, Chinese Academy of Sciences, China), Yu Wen (Institute of Information Engineering, Chinese Academy of Sciences, China), Huiying Wang (Institute of Information Engineering, Chinese Academy of Sciences, China), and Xu Cheng (Peking University, China)

Session TrustCom_03: Trustworthy and Secure AI (III)

Safety or Not? A Comparative Study for Deep Learning Apps on Smartphones 109
Jin Au-yeung (University of Jinan, China), Shanshan Wang (University of Jinan, China), Yuchen Liu (University of Jinan, China), and Zhenxiang Chen (University of Jinan, China)

Big Data Assisted Object Detection with Privacy Protection 117
Jianlin Zhang (Fujian Normal University, China), XiaoDing Wang (Fujian Normal University, China), and Hui Lin (Fujian Normal University, China)

FINDER: A Simple and Effective Defender Against Unnoticeable Graph Injection Attacks 125
Linlin Su (Guangxi Normal University, China), Jinyan Wang (Guangxi Normal University, China), Zeming Gan (Guangxi Normal University, China), and Xianxian Li (Guangxi Normal University, China)

FlowBERT: An Encrypted Traffic Classification Model Based on Transformers using Flow Sequence 133
Quanbo Pan (Institute of Information Engineering, Chinese Academy of Sciences, Beijing, China), Yang Yu (Qufu Normal University, Jining, China), Hanbing Yan (National Computer Network Emergency Response Technical Team/Coordination Center of China, Beijing, China), Maoli Wang (Qufu Normal University, Jining, China), and Bingzhi Qi (Shandong Jianzhu University, Jinan, China)

Fooling Object Detectors in the Physical World with Natural Adversarial Camouflage 141
Dandan Li (Shanghai University, China), Yufeng Li (Shanghai University, China; Purple Mountain Laboratories, China), Guiqi Zhang (Shanghai University, China), Ke Sun (Shanghai University, China), and Jiangtao Li (Shanghai University, China)

Too Noisy, or Not Too Noisy? A Private Training in Machine Learning 149
Lukasz Krzywiecki (Wroclaw University of Science and Technology, Poland), Grzegorz Zaborowski (Wroclaw University of Science and Technology, Poland), and Marcin Zawada (Wroclaw University of Science and Technology, Poland)

Session TrustCom_04: Federated Learning

DFedXGB: An XGB Vertical Federated Learning Framework with Data Desensitization	157
<i>Qing Yang (State Key Laboratory of Public Big Data, Guizhou, China), Youliang Tian (State Key Laboratory of Public Big Data, Guizhou, China), and Jinbo Xiong (Fujian Provincial Key Laboratory of Network Security and Cryptology, Fujian, China)</i>	
Impact of Aggregation Function Randomization Against Model Poisoning in Federated Learning..	165
<i>Seyedsina Nabavirazavi (Florida International University, USA), Rahim Taheri (University of Portsmouth, UK), Mohammad Shojafar (University of Surrey, UK), and Sundararaja Sitharama Iyengar (Florida International University, USA)</i>	
FL-TIA: Novel Time Inference Attacks on Federated Learning	173
<i>Chamara Sandeepa (University College Dublin, Ireland), Bartłomiej Siniarski (University College Dublin, Ireland), Shen Wang (University College Dublin, Ireland), and Madhusanka Liyanage (University College Dublin, Ireland)</i>	
Scalable Federated Learning for Fingerprint Recognition Algorithm	181
<i>Chenzhuo Wang (Civil Aviation University of China, China), Yanrong Lu (Civil Aviation University of China, China), and Athanasios V. Vasilakos (University of Agder, Center for AI Research, Norway)</i>	
FedRSM: Representational-Similarity-Based Secured Model Uploading for Federated Learning	189
<i>Gengxiang Chen (Sun Yat-Sen University, China), Sheng Liu (Sun Yat-Sen University, China), Xu Yang (Sun Yat-Sen University, China), Tao Wang (Sun Yat-Sen University, China), Linlin You (Sun Yat-Sen University, China), and Feng Xia (Royal Melbourne Institute of Technology, Australia)</i>	
Defending Against Adversarial Attacks in Federated Learning on Metric Learning Model	197
<i>Zhipin Gu (National University of Defense Technology, China), Jiangyong Shi (National University of Defense Technology, China), Yuexiang Yang (National University of Defense Technology, China), and Liangzhong He (China Mobile (Suzhou) Software Technology Co. Ltd., China)</i>	
Crowdsourcing-Based Model Testing in Federated Learning	207
<i>Yunpeng Yi (Shandong University, China), Hongtao Lv (Shandong University, China), Tie Luo (Missouri University of Science and Technology, USA), Junfeng Yang (Beijing aerospace automatic control institute, China), Lei Liu (Shandong University, China; Shandong Research Institute of Industrial Technology, China), and Lizhen Cui (Shandong University, China)</i>	
HDFL: Private and Robust Federated Learning using Hyperdimensional Computing	214
<i>Harsh Kasyap (Indian Institute of Technology Patna, India), Somanath Tripathy (Indian Institute of Technology Patna, India), and Mauro Conti (University of Padua, Italy)</i>	
Byzantine-Robust Federated Learning Through Dynamic Clustering	222
<i>Hanyu Wang (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Liming Wang (Institute of Information Engineering, Chinese Academy of Sciences, China), and Hongjia Li (Institute of Information Engineering, Chinese Academy of Sciences, China)</i>	

FedDLM: A Fine-Grained Assessment Scheme for Risk of Sensitive Information Leakage in Federated Learning-Based Android Malware Classifier	231
<i>Changnan Jiang (Beihang University, China), Chunhe Xia (Beihang University, China; Guangxi Normal University, China), Chen Chen (Beihang University, China), Huacheng Li (Beihang University, China), Tianbo Wang (Beihang University, China; Shanghai Key Laboratory of Computer Software Evaluating and Testing, China), and Xiaojian Li (Guangxi Normal University, China)</i>	

Session TrustCom_05: Blockchain and Distributed Ledger (I)

HyperChain: A Dynamic State Sharding Protocol Supporting Smart Contracts to Achieve Low Cross-Shard and Scalability	241
<i>Hengyu Pan (University of Science and Technology of China, China), Cheng Qu (University of Science and Technology of China, China), Haowen Zhang (University of Science and Technology of China, China), Shuo Wang (University of Science and Technology of China, China), and Jing Li (University of Science and Technology of China, China)</i>	
Efficient Covert Communication Scheme Based on Ethereum	249
<i>Yuanyuan Li (Chongqing University of Posts and Telecommunications, China), Wei Chen (Chongqing University of Posts and Telecommunications, China), Xin Huang (Chongqing University of Posts and Telecommunications, China), Peng Han (Chongqing Research Center for Information and Automation Technology, China), Shenhai Zheng (Chongqing University of Posts and Telecommunications, China), and Zhiqin Zhu (Chongqing University of Posts and Telecommunications, China)</i>	
Two-Stage Smart Contract Vulnerability Detection Combining Semantic Features and Graph Features	257
<i>Zhenkun Luo (Guangzhou University, China), Shuhong Chen (Guangzhou University, China), Guojun Wang (Guangzhou University, China), and Hanjun Li (Guangzhou University, China)</i>	
TI-DNS: A Trusted and Incentive DNS Resolution Architecture Based on Blockchain	265
<i>Yufan Fu (Institute of Computing Technology, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Jiuqi Wei (Institute of Computing Technology, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Ying Li (Institute of Computing Technology, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Botao Peng (Institute of Computing Technology, Chinese Academy of Sciences, China), and Xiaodong Li (Institute of Computing Technology, Chinese Academy of Sciences, China)</i>	

Felix: A Model of Detecting Off-Chain Abnormal States in Decentralized Applications	275
<i>Lianhai Wang (Qilu University of Technology (Shandong Academy of Sciences), China), Qihao Huang (Qilu University of Technology (Shandong Academy of Sciences), China), Wei Shao (Shandong Fundamental Research Center for Computer Science, China), Jinpeng Wang (Qilu University of Technology (Shandong Academy of Sciences), China), Xiaoqian Liu (Qilu University of Technology (Shandong Academy of Sciences), China), and Fansheng Wang (Qilu University of Technology (Shandong Academy of Sciences), China)</i>	
Opcode Sequences-Based Smart Contract Vulnerabilities Detection using Deep Learning	284
<i>Jinyao Zhu (Guangzhou University, China), Xiaofei Xing (Guangzhou University, China), Guojun Wang (Guangzhou University, China), and Peiqiang Li (Guangzhou University, China)</i>	
A Commitment and Ring Signature Based Scheme for Amount and Identity Privacy Protection in Blockchain	292
<i>Shiyong Huang (China University of Geosciences, China; Wuzhou University, China), Haocong Li (Beijing Jiaotong University, China), Ruoting Xiong (University of East Anglia, UK), Wei Ren (China University of Geosciences, China; Wuzhou University, China; Beijing Key Laboratory of Urban Spatial Information Engineering, China), Jie He (Wuzhou University, China), and Yi Ren (University of East Anglia, UK)</i>	
IHFBB: A High-Performance Blockchain Framework for Improving Hyperledger Fabric Permissioned Chain	300
<i>Min Xu (Fujian Normal University, China), Xiaoding Wang (Fujian Normal University, China), and Hui Lin (Fujian Normal University, China)</i>	

Session TrustCom_06: Blockchain and Distributed Ledger (II)

Rethinking Practical Blockchain-Based Symmetric Searchable Encryption Services	307
<i>Jun Zhao (Monash University, Australia), Jiangshan Yu (Monash University, Australia), Xingliang Yuan (Monash University, Australia), Joseph K. Liu (Monash University, Australia), and Cong Zuo (Beijing Institute of Technology, China)</i>	
A Secure Contactless Payment System with Bidirectional Blockchain and Blake Hash Function	318
<i>Bhaskar Rongali (Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, India), Satyajit Mohapatra (Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, India), and Sanjeet Kumar Nayak (Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram, India)</i>	
PrivOff: Secure and Privacy-Preserving Data Management for Distributed Off-Chain Networks	326
<i>Htet Htet Hlaing (National Institute of Information and Communications Technology (NICT), Japan) and Hitoshi Asaeda (National Institute of Information and Communications Technology (NICT), Japan)</i>	

ChainPass: A Privacy-Preserving Complete Cross-Chain Authentication for Consortium Blockchains	334
<i>Yuwei Xu (Southeast University, China; Purple Mountain Laboratories for Network and Communication Security, China; Engineering Research Center of Blockchain Application, Supervision and Management, China), Ying Zhang (Southeast University, China; Engineering Research Center of Blockchain Application, Supervision and Management, China), Haonan Shi (Southeast University, China; Engineering Research Center of Blockchain Application, Supervision and Management, China), and Jie Cao (Southeast University, China; Engineering Research Center of Blockchain Application, Supervision and Management, China)</i>	
VMR-Tree: Efficient and Verifiable Location-Based kNN Queries on Blockchain	342
<i>Yiping Teng (Shenyang Aerospace University, China), Lei Liu (Shenyang Aerospace University, China), Jiawei Qi (Shenyang Aerospace University, China), Haochun Pan (Shenyang Aerospace University, China), and Chunlong Fan (Shenyang Aerospace University, China)</i>	
UNITE: Privacy-Aware Verifiable Quality Assessment via Federated Learning in Blockchain-Empowered Crowdsourcing	352
<i>Liangen He (East China Normal University, China), Haiqin Wu (East China Normal University, China), Liang Li (East China Normal University, China), and Jucai Yang (East China Normal University, China)</i>	
FedJudge: Blockchain-Based Full-Lifecycle Trustworthy Federated Learning Incentive Mechanism	361
<i>Jiuzheng Wang (Beijing Institute of Technology, China), Ruilin Zhang (Kuaishou Technology, China), Xinyi Li (Tsinghua University, China), and Hao Yin (Tsinghua University, China)</i>	

Session TrustCom_07: Network and System Security (I)

HiSec: Towards Cyber Threat Correlation and Discovery Based on Hierarchical Graph Neural Networks	369
<i>Liwen Xu (Shanghai Jiao Tong University, China), Xiang Lin (Shanghai Jiao Tong University, China), Jianhua Li (Shanghai Jiao Tong University, China), Min Bai (Qianxin Technology Group Co., LTD, China), and Liejun Wang (Qianxin Technology Group Co., LTD, China)</i>	
Protecting IoT Servers Against Flood Attacks with the Quasi Deterministic Transmission Policy	379
<i>Erol Gelenbe (Institute of Theoretical & Applied Informatics, Polish Academy of Sciences, PL; Université Côte d'Azur, FR; Yaşar University, TR) and Mohammed Nasereddin (Institute of Theoretical & Applied Informatics, Polish Academy of Sciences, PL)</i>	
Lightweight Hierarchical Deterministic Wallet Supporting Stealth Address for IoT	387
<i>Chenghe Dong (North China University of Technology, China), Jianhong Zhang (North China University of Technology, China), Zongyi Lv (North China University of Technology, China), and Ruxuan Zhang (North China University of Technology, China)</i>	

Investigating Fraud and Misconduct in Legitimate Internet Economy Based on Customer Complaints	394
<i>Wenrui Ma (Zhejiang Gongshang University, China), Ying Cong (Zhejiang Gongshang University, China), Haitao Xu (Zhejiang University, China), Fan Zhang (Zhejiang University, China), Zhao Li (Zhejiang University, China), and Siqi Ren (Zhejiang Gongshang University, China)</i>	
Detecting BGP Anomalies Based on Spatio-Temporal Feature Representation Model for Autonomous Systems	404
<i>Zimian Liu (PLA Strategic Support Force Information Engineering University, China), Han Qiu (PLA Strategic Support Force Information Engineering University, China), Rui Wang (PLA Strategic Support Force Information Engineering University, China), Junhu Zhu (PLA Strategic Support Force Information Engineering University, China), and Qingxian Wang (PLA Strategic Support Force Information Engineering University, China)</i>	
Do NoT Open (DOT): A Unified Generic and Specialized Models for Detecting Malicious Email Attachments	412
<i>Vinay Sachidananda (Nanyang Technological University, Singapore), Sivaanandh Muneeswaran (National University of Singapore, Singapore), Yang Liu (Nanyang Technological University, Singapore), and Kwok-Yan Lam (Nanyang Technological University, Singapore)</i>	
GuiDiv: Mitigating Code-Reuse Attack in an IoT Cluster using Guided Control Flow Diversification.	422
<i>Yuanpei Li (Zhengzhou University, China), Qinglei Zhou (Zhengzhou University, China), Bin Li (Zhengzhou University, China), and Yan Zhuang (Zhengzhou University, China)</i>	
Enhancing Security in Industrial IoT: A Taxonomy-Driven Approach to Risk Assessment	434
<i>Muna Al-Hawawreh (Deakin University, Australia) and Robin Doss (Deakin University, Australia)</i>	
Measuring DNS-over-Encryption Performance Over IPv6	444
<i>Liang Jiao (Chinese Academy of Sciences, China; University of Chinese Academy of Sciences; National Computer Network Emergency Response Technical Team/Coordination Center of China Shandong Branch), Yujia Zhu (Chinese Academy of Sciences, China; University of Chinese Academy of Sciences), Baiyang Li (Chinese Academy of Sciences, China; University of Chinese Academy of Sciences), and Qingyun Liu (Chinese Academy of Sciences, China; University of Chinese Academy of Sciences)</i>	

HackMentor: Fine-Tuning Large Language Models for Cybersecurity	452
<i>Jie Zhang (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Hui Wen (Institute of Information Engineering, Chinese Academy of Sciences, China), Liting Deng (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Mingfeng Xin (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Zhi Li (Institute of Information Engineering, Chinese Academy of Sciences, China), Lun Li (Institute of Information Engineering, Chinese Academy of Sciences, China), Hongsong Zhu (Institute of Information Engineering, Chinese Academy of Sciences, China), and Limin Sun (Institute of Information Engineering, Chinese Academy of Sciences, China)</i>	

Session TrustCom_08: Network and System Security (II)

Extracting Length Field of Unknown Binary Network Protocol from Static Trace	462
<i>Xiuwen Sun (Anhui University), Zhihao Wu (Anhui University), Jing Lin (Anhui University), Pengfei Fu (Anhui University), Jie Cui (Anhui University), and Hong Zhong (Anhui University)</i>	
On ECG Signal Classification: An NAS-Empowered Semantic Communication System	470
<i>Huanlai Xing (Southwest Jiaotong University, China), Huaming Ma (Southwest Jiaotong University, China), Zhiwen Xiao (Southwest Jiaotong University, China), Xinhan Wang (Southwest Jiaotong University, China), Bowen Zhao (Southwest Jiaotong University, China), Shouxi Luo (Southwest Jiaotong University, China), Li Feng (Southwest Jiaotong University, China), and Lexi Xu (China United Network Communications Corporation, China)</i>	
Parallel Pattern Matching over Brotli Compressed Network Traffic	477
<i>Xiuwen Sun (Anhui University), Guangzheng Zhang (Anhui University), Di Wu (Anhui University), Qingying Yu (Anhui Normal University), Jie Cui (Anhui University), and Hong Zhong (Anhui University)</i>	
Detecting DDoS Attacks on the Network Edge: An Information-Theoretic Correlation Analysis	485
<i>Ryosuke Araki (Nara Institute of Science and Technology, Japan), Kshira Sagar Sahoo (Umeå University, Sweden), Yuzo Taenaka (Nara Institute of Science and Technology, Japan), Youki Kadobayashi (Nara Institute of Science and Technology, Japan), Erik Elmroth (Umeå University, Sweden), and Monowar Bhuyan (Umeå University, Sweden)</i>	
RCA-IDS: A Novel Real-Time Cloud-Based Adversarial IDS for Connected Vehicles	495
<i>Zahra Pooranian (University of Reading, UK), Mohammad Shojafar (University of Surrey, UK), Pedram Asef (University College London, UK), Matthew Robinson (University of Hertfordshire, UK), Harry Lees (RL Auto Ltd, UK), and Mark Longden (RL Auto Ltd, UK)</i>	

Cerberus: Efficient OSPS Traffic Identification Through Multi-Task Learning	504
<i>Yuwei Xu (Southeast University, China; Purple Mountain Laboratories for Network and Communication Security, China; Engineering Research Center of Blockchain Application, Supervision and Management, China), Xiaotian Fang (Southeast University, China; Engineering Research Center of Blockchain Application, Supervision and Management, China), Jie Cao (Southeast University, China; Engineering Research Center of Blockchain Application, Supervision and Management, China), Rou Yu (Southeast University, China; Engineering Research Center of Blockchain Application, Supervision and Management, China), Kehui Song (Nankai University, China), and Guang Cheng (Southeast University, China; Purple Mountain Laboratories for Network and Communication Security, China)</i>	
Topology Construction Method of anti-Tracking Network Based on Cross-Domain Decentralized Gravity Model	512
<i>Zhefeng Nan (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Qian Qiang (National Computer Network Emergency Response Technical Team/Coordination Center, China), Tianning Zang (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Changbo Tian (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Shuyuan Zhao (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), and Shuhe Liu (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China)</i>	
Push It Real Good: Towards Behavioral Access Control using the Door Handle Push-Down-Phase Only	522
<i>Eric Klieme (University of Potsdam, Germany), Ben-Noah Engelhaupt (University of Potsdam, Germany), Vincent Xenon Rahn (University of Potsdam, Germany), and Christoph Meinel (University of Potsdam, Germany)</i>	
FineCTI: A Framework for Mining Fine-Grained Cyber Threat Information from Twitter using NER Model	531
<i>Chunyan Ma (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Jun Jiang (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Kai Zhang (Institute of Information Engineering, Chinese Academy of Sciences, China), Zhengwei Jiang (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Peian Yang (Institute of Information Engineering, Chinese Academy of Sciences, China), Xuren Wang (Capital Normal University, China), and Huamin Feng (Beijing Electronic Science and Technology Institute, China)</i>	

Session TrustCom_09: Network and System Security (III)

SSdetector: Secure and Manageable Host-based IDS with SGX and SMM	539
<i>Yoshimichi Koga (Kyushu Institute of Technology) and Kenichi Kourai (Kyushu Institute of Technology)</i>	
A First Look at Digital Rights Management Systems for Secure Mobile Content Delivery	549
<i>Amir Rafi (Information Security Group, Royal Holloway, University of London, United Kingdom), Carlton Shepherd (Newcastle University, United Kingdom), and Konstantinos Markantonakis (Information Security Group, Royal Holloway, University of London, United Kingdom)</i>	
Towards Understanding Checkpointing in Transiently Powered IoT Networks	559
<i>Jawaher Alharbi (University of Warwick, UK), Adam Chester (Nottingham Trent University, UK), and Arshad Jhumka (University of Leeds, UK)</i>	
PANGA: Attention-Based Principal Neighborhood Aggregation for Forecasting Future Cyber Attacks	569
<i>Alok Trivedi (Indian Institute of Technology, Kanpur) and Priyanka Bagade (Indian Institute of Technology, Kanpur)</i>	
SRBR: Anti-Selfish Routing Based on Social Similarity and Reputation using Fuzzy Logic	577
<i>Haoxiang Wang (Wuhan University, China), Yu'ang Zhang (Wuhan University, China), Yujie Song (Wuhan University, China), Yue Cao (Wuhan University, China), Chee Yen Leow (Universiti Teknologi Malaysia, Malaysia), and Shihan Bao (Innovation centre, CICT Mobile, China)</i>	
Reinforcement Learning Based Neighbour Selection for VANET with Adaptive Trust Management	585
<i>Orvila Sarker (University of Adelaide), Hong Shen (University of Adelaide), and M. Ali Babar (University of Adelaide)</i>	
Unified Identification of Anomalies on the Edge: A Hybrid Sequential PGM Approach	595
<i>Javad Forough (Umeå University, Sweden), Monowar Bhuyan (Umeå University, Sweden), and Erik Elmroth (Umeå University, Sweden)</i>	
Grading and Calculation of Synchronic Distance in Petri Nets for Trustworthy Modeling and Analyzing	605
<i>Yumeng Cheng (Shaanxi Normal University, China), Wangyang Yu (Shaanxi Normal University, China), Xiaojun Zhai (University of Essex, UK), Fei Hao (Shaanxi Normal University, China), and Yuan Liu (Shaanxi Normal University, China)</i>	
Temporal-Aware Lightweight Visual Tracking Method for Dynamic Traffic Scenes	612
<i>Xuming Cen (Shenyang Jianzhu University, China), Nan Hu (Shenyang Jianzhu University, China), Haozhe Wang (University of Exeter, UK), and Shiyi Liu (Shenyang Jianzhu University, China)</i>	

Session TrustCom_10: Attacks and Anomalies Detection

Multi-Stage Attack Detection and Prediction using Graph Neural Networks: An IoT Feasibility Study	620
<i>Hamdi Friji (CEA, France; Polytechnic Institute of Paris, France), Ioannis Maoromatis (Toshiba Europe Ltd., UK), Adrian Sanchez-Mompo (Toshiba Europe Ltd., UK), Pietro Carnelli (Toshiba Europe Ltd., UK), Alexis Olivereau (CEA, France), and Aftab Khan (Toshiba Europe Ltd., UK)</i>	
Insider Threat Detection Based On Heterogeneous Graph Neural Network	628
<i>Tian Tian (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Yiru Gong (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Bo Jiang (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Junrong Liu (Institute of Information Engineering, Chinese Academy of Sciences, China), Huamin Feng (Beijing Electronic Science and Technology Institute, China), and Zhigang Lu (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China)</i>	
Inter-Slice Correlation Weighted Fusion for Universal Lesion Detection	636
<i>Muwei Jian (Shandong University of Finance and Economics, China), Yue Jin (Shandong University of Finance and Economics, China), Rui Wang (Shandong University of Finance and Economics, China), Xiaoguang Li (Beijing University of Technology, China), and Hui Yu (University of Portsmouth, UK)</i>	
Anomaly Detection in Dynamic Networks Through Edge-Tight Structure Embedding	644
<i>Liming Wang (Zhengzhou University, China), Jiaying Fan (Zhengzhou University, China), Fengzhe Zhong (Henan Key Laboratory of Cyberspace Situation Awareness, China), Yan Liu (Henan Key Laboratory of Cyberspace Situation Awareness, China), and Jinyang Liu (Henan Key Laboratory of Cyberspace Situation Awareness, China)</i>	
A DGA Domain Name Detection Method Based on Two-Stage Feature Reinforcement	652
<i>Hongyu Yang (Civil Aviation University of China, China), Tao Zhang (Civil Aviation University of China, China), Ze Hu (Civil Aviation University of China, China), Liang Zhang (The University of Arizona, USA), and Xiang Cheng (Yangzhou University, China)</i>	
High-Knowledge Shilling Attack Detection Method Based on Genetic co-Forest	660
<i>Lingyue Su (Nanjing University of Science and Technology, China) and Yongli Wang (Nanjing University of Science and Technology, China)</i>	
REDA: Malicious Traffic Detection Based on Record Length and Frequency Domain Analysis	668
<i>Wanshuang Lin (Beihang University, China), Chunhe Xia (Beihang University, China; Guangxi Normal University, China), Tianbo Wang (Beihang University, China; Shanghai Key Laboratory of Computer Software Evaluating and Testing, China), Chen Chen (Beihang University, China), Yuan Zhao (Beihang University, China), and Weidong Zhou (Beihang University, China)</i>	

LActDet: An Automatic Network Attack Activity Detection Framework for Multi-Step Attacks	676
<i>Huiran Yang (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Jiaqi Kang (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Yueyue Dai (Huazhong University of Science and Technology, China), Jiyan Sun (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Yan Zhang (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Huajun Cui (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), and Can Ma (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China)</i>	
IAD-Net: Multivariate KPIs Interpretable Anomaly Detection with Dual Gated Residual Fusion Networks	686
<i>Wen Liu (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Degang Sun (University of Chinese Academy of Sciences, China), Haitian Yang (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), He Zhu (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), and Yan Wang (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China)</i>	
MTD-RTPE: A Malicious Traffic Detection Method Based on Relative Time-Delay Positional Encoding	694
<i>Jingyu Liu (Zhengzhou University, China), Chunfang Yang (Henan Key Laboratory of Cyberspace Situation Awareness, China), Ma Zhu (Henan Key Laboratory of Cyberspace Situation Awareness, China), Baojun Qi (Henan Key Laboratory of Cyberspace Situation Awareness, China), Xueyuan Fu (Henan Key Laboratory of Cyberspace Situation Awareness, China), and Mengyang Zhou (Henan Key Laboratory of Cyberspace Situation Awareness, China)</i>	

Session TrustCom_11: Trusted Computing

Towards Trust-Centric Networking: A General Model for Trust Evaluation	704
<i>Andrés F. Murillo (Fujitsu Research of Europe, UK), Ayoub Messous (Fujitsu Research of Europe, UK), Andikan Otung (Fujitsu Research of Europe, UK), and Motoyoshi Sekiya (Fujitsu Laboratories, Japan)</i>	
TrustGlass: Human-Computer Trusted Paths with Augmented Reality Smart Glasses	712
<i>Hélio Borges (INESC-ID, Instituto Superior Técnico, Universidade de Lisboa, Portugal), Daniel Andrade (INESC-ID, Instituto Superior Técnico, Universidade de Lisboa, Portugal), João Nuno Silva (INESC-ID, Instituto Superior Técnico, Universidade de Lisboa, Portugal), and Miguel Correia (INESC-ID, Instituto Superior Técnico, Universidade de Lisboa, Portugal)</i>	

Trustworthiness and Subversion in Large Service-Oriented Multi-Agent Systems Under Virtual Anonymity and Blind Provider Selection	722
<i>Jerzy Konorski (Gdansk University of Technology, Poland)</i>	
Enhanced Ticket Transparency (eTT) Framework for Single Sign-On Services with Pseudonyms ...	730
<i>Guangqi Liu (Institute of Information Engineering, CAS, China; University of Chinese Academy of Sciences, China), Jingqiang Lin (University of Chinese Academy of Sciences, China), Dawei Chu (Headquarter of Chinese Academy of Sciences, China), Xiaokun Zhang (University of Science and Technology of China, China), Qiong Xiao Wang (Beijing Certificate Authority Co., Ltd., China), Cunqing Ma (Institute of Information Engineering, CAS, China), Fengjun Li (University of Kansas, USA), and Dingfeng Ye (Institute of Information Engineering, CAS, China)</i>	
Cluster Nodes Integrity Attestation and Monitoring Scheme for Confidential Computing Platform	740
<i>Ketong Shang (Institute of Software Chinese Academy of Sciences, China), Fang Lu (Alibaba Group, China), Ke Huang (Institute of Software Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Yu Qin (Institute of Software Chinese Academy of Sciences, China), Wei Li (Institute of Software Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), and Wei Feng (Institute of Software Chinese Academy of Sciences, China)</i>	
SCATMAN: A Framework for Enhancing Trustworthiness in Digital Supply Chains	750
<i>Michael Eckel (Fraunhofer Institute SIT, ATHENE Center, Germany), Anirban Basu (Hitachi, Ltd., Japan), Satoshi Kai (Hitachi, Ltd., Japan), Hervais Simo Fhom (Fraunhofer Institute SIT, ATHENE Center, Germany), Siniša Đukanović (Fraunhofer Institute SIT, ATHENE Center, Germany), Henk Birkholz (Fraunhofer Institute SIT, ATHENE Center, Germany), Shingo Hane (Hitachi, Ltd., Japan), and Matthias Lieske (Hitachi Europe GmbH, Germany)</i>	
PLDB: Protecting LSM-Based Key-Value Store using Trusted Execution Environment	762
<i>Chenkai Shen (Shanghai Jiao Tong University, China) and Lei Fan (Shanghai Jiao Tong University, China)</i>	
A Cost-Effective Automation Method of Massive Vulnerabilities Analysis and Remediation Based on Cloud Native	772
<i>Tian Hu (University of Chinese Academy of Sciences, China), Shangyuan Zhuang (University of Chinese Academy of Sciences, China), Jiyan Sun (Institute of Information Engineering Chinese Academy of Sciences, China), Yinlong Liu (University of Chinese Academy of Sciences, China), Wei Ma (Institute of Information Engineering Chinese Academy of Sciences Beijing, China), and Hongchao Wang (University of Chinese Academy of Sciences, China)</i>	
BiLSTM and VAE Enhanced Multi-Task Neural Network for Trust-Aware E-Commerce Product Analysis	780
<i>Shusuke Wani (Shiga University, Japan), Xiaokang Zhou (Shiga University, Japan), and Shohei Shimizu (Shiga University, Japan)</i>	

Session TrustCom_12: Cryptography

TouchEnc: a Novel Behavioural Encoding Technique to Enable Computer Vision for Continuous Smartphone User Authentication	788
<i>Pefer Aaby (Edinburgh Napier University, United Kingdom), William J Buchanan (Edinburgh Napier University, United Kingdom), Zhiyuan Tan (Edinburgh Napier University, United Kingdom), and Mario Valerio Giuffrida (University of Nottingham, United Kingdom)</i>	
Hydamc: A Hybrid Detection Approach for Misuse of Cryptographic Algorithms in Closed-Source Software	796
<i>Haoling Fan (Institute of Information Engineering, Chinese Academy of Sciences, China; Data Assurance and Communication Security Research Center, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Fangyu Zheng (University of Chinese Academy of Sciences, China), Jingqiang Lin (University of Science and Technology of China, China), Lingjia Meng (Institute of Information Engineering, Chinese Academy of Sciences, China; Data Assurance and Communication Security Research Center, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Mingyu Wang (Institute of Information Engineering, Chinese Academy of Sciences, China; Data Assurance and Communication Security Research Center, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Qiang Wang (Institute of Information Engineering, Chinese Academy of Sciences, China; Data Assurance and Communication Security Research Center, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Shijie Jia (Institute of Information Engineering, Chinese Academy of Sciences, China; Data Assurance and Communication Security Research Center, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), and Yuan Ma (Institute of Information Engineering, Chinese Academy of Sciences, China; Data Assurance and Communication Security Research Center, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China)</i>	
The Broken Verifying: Inspections at Verification Tools for Windows Code-Signing Signatures	804
<i>Guangqi Liu (Institute of Information Engineering, CAS, China), Qiongxiao Wang (Beijing Certificate Authority Co., Ltd., China), Cunqing Ma (Institute of Information Engineering, CAS, China), Jingqiang Lin (University of Science and Technology of China, China), Yanduo Fu (Institute of Information Engineering, CAS, China), Bingyu Li (Beihang University, China), and Dingfeng Ye (Institute of Information Engineering, CAS, China)</i>	
A Broadband Subliminal Channel in Signatures Without Sharing the Signing Key	814
<i>Qinghua Hu (University of Electronic Science and Technology of China, China), Chunxiang Xu (University of Electronic Science and Technology of China, China), and Wanpeng Li (University of Aberdeen, UK)</i>	
CEIVS: A Scalable and Secure Encrypted Image Retrieval Scheme with Vertical Subspace Clustering	823
<i>Ruizhong Du (Hebei University, China), Jing Cui (Hebei University, China), Mingyue Li (Hebei University, China), and Yuqing Zhang (Nankai University, China)</i>	

Sym-Fed: Unleashing the Power of Symmetric Encryption in Cross-Silo Federated Learning	833
<i>Jinzhao Wang (University of South China, China), Wenlong Tian (University of South China, China; Nanyang Technology University, Singapore), Ruixuan Li (Huazhong University of Science and Technology, China), Junwei Tang (Wuhan Textile University, China), Xuming Ye (University of South China, China), Yaping Wan (University of South China, China), and Zhiyong Xu (Suffolk University, USA)</i>	
Securing an Efficient Lightweight AES Accelerator	841
<i>Ruoyu Huang (Delft University of Technology, Netherlands; Silicon Integrated, Netherlands), Abdullah Aljuffri (Delft University of Technology, Netherlands), Said Hamdioui (Delft University of Technology, Netherlands), Kezheng Ma (Silicon Integrated, Netherlands), and Mottaqiallah Taouil (Delft University of Technology, Netherlands)</i>	
Efficient and Secure Authentication Key Establishment Protocol using Chaotic Map and PUF in Smart Environments	849
<i>Fengling Pang (Central China Normal University, China), Chingfang Hsu (Central China Normal University, China), Man Ho Au (The Hong Kong Polytechnic University, China), Lein Harn (University of Missouri-Kansas City, USA), Ze Zhang (Central China Normal University, China), and Long Li (Central China Normal University, China)</i>	

Session TrustCom_13: Computer and Data Security (I)

GenRex: Leveraging Regular Expressions for Dynamic Malware Detection	857
<i>Dominika Regéciová (Brno University of Technology, Czech Republic) and Dušan Kolář (Brno University of Technology, Czech Republic)</i>	
Differential Privacy Frequent Closed Itemset Mining over Data Stream	865
<i>Xuebin Ma (Inner Mongolia University, China), Shengyi Guan (Inner Mongolia University, China), and Yanan Lang (Inner Mongolia University, China)</i>	
MPS: A Multiple Poisoned Samples Selection Strategy in Backdoor Attack	873
<i>Weihong Zou (Central South University), Shigeng Zhang (Central South University; Science and Technology on Parallel and Distributed Processing Laboratory (PDL)), Weiping Wang (Central South University), Jian Zhang (Central South University), and Xuan Liu (Hunan University)</i>	
UFADF: A Unified Feature Analysis and Detection Framework for Malicious Office Documents ...	881
<i>Yang Hu (Beihang University, China), Jia Chen (Beihang University, China), and Xin Luo (Southwest University, China)</i>	
EAMDM: An Evolved Android Malware Detection Method using API Clustering	889
<i>Hongyu Yang (Civil Aviation University of China, China), Youwei Wang (Civil Aviation University of China, China), Liang Zhang (The University of Arizona, USA), Ze Hu (Civil Aviation University of China, China), Xiang Cheng (Yangzhou University, China), and Laiwei Jiang (Civil Aviation University of China, China)</i>	

SPSW: Database Watermarking Based on Fake Tuples and Sparse Priority Strategy	896
<i>Zhiwen Ren (University of Science and Technology of China, China), Zehua Ma (University of Science and Technology of China, China), Weiming Zhang (University of Science and Technology of China, China), and Nenghai Yu (University of Science and Technology of China, China)</i>	
Software Vulnerabilities Detection Based on a Pre-Trained Language Model	904
<i>Wenlin Xu (Yunnan University, China), Tong Li (Yunnan Agricultural University, China), Jinsong Wang (Yunnan University of Finance and Economics, China), Haibo Duan (Yunnan University of Finance and Economics, China), and Yahui Tang (Chongqing University of Posts and Telecommunications, China)</i>	
Crowdsensed Data-Oriented Distributed and Secure Spatial Query Scheme	912
<i>Yuxi Li (Northeastern University, China), Fucui Zhou (Northeastern University, China), Jingjing Chen (Northeastern University, China), and Dong Ji (National Frontiers Science Center for Industrial Intelligence and Systems Optimization, Northeastern University, China)</i>	

Session TrustCom_14: Computer and Data Security (II)

Flush+Revisit: A Cross-CCX Side-Channel Attack on AMD Processors	920
<i>Danping Li (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Ziyuan Zhu (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Jiao Shen (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Yusha Zhang (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Gang Shi (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), and Dan Meng (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China)</i>	
Self-Attention is What You Need to Fool a Speaker Recognition System	929
<i>Fangwei Wang (Hebei Normal University, China), Ruixin Song (Hebei Normal University, China), Zhiyuan Tan (Edinburgh Napier University, UK), Qingru Li (Hebei Normal University, China), Changguang Wang (Hebei Normal University, China), and Yong Yang (Yunnan University, China)</i>	
SATBA: An Invisible Backdoor Attack Based on Spatial Attention	937
<i>Huasong Zhou (Ocean University of China, China), Xiaowei Xu (Ocean University of China, China), Xiaodong Wang (Ocean University of China, China), and Leon Bevan Bullock (Ocean University of China, China)</i>	

MemInspect: Memory Forensics for Investigating Fileless Attacks	946
<i>Tao Leng (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China; Intelligent Policing Key Laboratory of Sichuan Province, China), Yuedong Pan (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Lixin Zhao (Institute of Information Engineering, Chinese Academy of Sciences, China), Aimin Yu (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Ziyuan Zhu (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Lijun Cai (Institute of Information Engineering, Chinese Academy of Sciences, China), and Dang Meng (Institute of Information Engineering, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China)</i>	
Towards Survivable In-Memory Stores with Parity Coded NVRAM	956
<i>Zhixuan Wang (Tianjin University of Technology, China), Guangping Xu (Tianjin University of Technology, China), Hongzhang Yang (Tianjin University of Technology, China), and Yulei Wu (University of Bristol, U.K.)</i>	
Secure Synchronized Spatio-Temporal Trajectory Similarity Search	964
<i>Yiping Teng (Shenyang Aerospace University, China), Jiawei Qi (Shenyang Aerospace University, China), Lei Liu (Shenyang Aerospace University, China), Shiqing Wang (Shenyang Aerospace University, China), Li Xu (Shenyang Aerospace University, China), and Chunlong Fan (Shenyang Aerospace University, China)</i>	
Sparsity Aware of TF-IDF Matrix to Accelerate Oblivious Document Ranking and Retrieval	974
<i>Zeshi Zhang (Tianjin University of Technology, China), Guangping Xu (Tianjin University of Technology, China), Hongzhang Yang (Tianjin University of Technology, China), and Yulei Wu (University of Bristol, U.K.)</i>	
Session TrustCom_15: Computer and Data Security (III)	
A Lightweight and high-Precision Approach for Bulky JavaScript Engines Fuzzing	982
<i>Lianpei Zhou (Tsinghua University, China), Xi Xiao (Tsinghua University, China), Guangwu Hu (Shenzhen Institute of Information Technology, China), Hao Li (Science and Technology on Communication Networks Laboratory, China), Xiangbo Wu (Science and Technology on Communication Networks Laboratory, China), and Tao Zhou (Guangdong Provincial Key Laboratory of Cyber and Information Security Vulnerability Research, China)</i>	
Fuzz Testing for Rust Library Functions	990
<i>Yongjian Guo (Tsinghua University, China), Xi Xiao (Tsinghua University, China), Yuanyi Lin (Tsinghua University, China), Hao Li (Science and Technology on Communication Networks Laboratory, China), Xiangbo Wu (Science and Technology on Communication Networks Laboratory, China), and Tao Zhou (Guangdong Provincial Key Laboratory of Cyber and Information Security Vulnerability Research, China)</i>	

Deanonymize Tor Hidden Services using Remote Website Fingerprinting	998
<i>Meiqi Wang (Institute of Information Engineering Chinese Academy of Sciences, China), Muqian Chen (National Internet Emergency Center (CNCERT/CC), China), Zeyu Li (Beijing University of Posts and Telecommunications, China), Xuebin Wang (Institute of Information Engineering Chinese Academy of Sciences, China), Jinqiao Shi (Beijing University of Posts and Telecommunications, China), and Binxing Fang (Guangzhou University, China)</i>	
SIMD Bootstrapping in FHEW Scheme	1006
<i>Man Chen (Shandong University, China), Yuyue Chen (Harbin Institute of Technology, China), and Zoe L. Jiang (Harbin Institute of Technology, Peng Cheng Laboratory, China)</i>	
SQL Injection Attack Sample Generation Based on IE-GAN	1014
<i>Mingdi Xu (Dept. of System Platform Wuhan Institute of Digital, China), Bo Xie (Dept. of System Platform Wuhan Institute of Digital, China), Feng Cui (Dept. of System Platform Wuhan Institute of Digital, China), Chaoyang Jin (Dept. of System Platform Wuhan Institute of Digital, China), and Yu Wang (Dept. of System Platform Wuhan Institute of Digital, China)</i>	
Random Chunks Generation Attack Resistant Cross-User Deduplication for Cloud Storage	1022
<i>Xin Tang (University of International Relations, China), Yiteng Zhou (University of International Relations, China), Yudan Zhu (University of International Relations, China), Mingjun Fu (University of International Relations, China), and Luchao Jin (University of International Relations, China)</i>	
FPHammer: A Device Identification Framework Based on DRAM Fingerprinting	1031
<i>Dawei Li (Beihang University, China), Di Liu (Beihang University, China), Yangkun Ren (Beihang University, China), Ziyi Wang (Beihang University, China), Yu Sun (Beihang University, China), Zhenyu Guan (Beihang University, China), Qianhong Wu (Beihang University, China), and Jianwei Liu (Beihang University, China)</i>	

Session TrustCom_16: Privacy and Trust

“A method Like This would be Overkill”: Developers’ Perceived Issues with Privacy-preserving Computation Methods	1041
<i>Patrick Kühnreiter (University of Göttingen, Germany), Viktoriya Pak (University of Göttingen, Germany), and Delphine Reinhardt (University of Göttingen, Germany)</i>	
Achieving Higher Level of Assurance in Privacy Preserving Identity Wallets	1049
<i>Benjamin Larsen (Technical University of Denmark, Denmark), Nada El Kasseem (University of Surrey, UK), Thanassis Giannetsos (Ubitech Ltd., Greece), Ioannis Krontiris (Huawei Technologies Duesseldorf GmbH, Germany), Stefanos Vasileiadis (Ubitech Ltd., Greece), and Liqun Chen (University of Surrey, UK)</i>	
CENSOR: Privacy-Preserving Obfuscation for Outsourcing SAT Formulas	1060
<i>Tassos Dimitriou (Kuwait University, Kuwait) and Khazam Alhamdan (Kuwait University, Kuwait)</i>	

Decentralized Matrix Factorization with Heterogeneous Differential Privacy	1068
<i>Wentao Hu (Shanghai University of Finance and Economics, China) and Hui Fang (Shanghai University of Finance and Economics, China)</i>	
Integrating VirtIO and QEMU on seL4 for Enhanced Devices Virtualization Support	1076
<i>Everton de Matos (Technology Innovation Institute, United Arab Emirates), Conor Lenon (Technology Innovation Institute, United Arab Emirates), Eduardo K. Viegas (Technology Innovation Institute, United Arab Emirates), Markku Ahvenjärvi (Unikie Oy, Finland), Hannu Lyytinen (Unikie Oy, Finland), Ivan Kuznetsov (Unikie Oy, Finland), Joonas Onatsu (Unikie Oy, Finland), and Anh Huy Bui (Unikie Oy, Finland)</i>	
Multi-Scale Feature Aggregation for Rumor Detection: Unveiling the Truth Within Text	1086
<i>Jianming Wu (Guangzhou University, China), ShuHong Chen (Guangzhou University, China), Guojun Wang (Guangzhou University, China), Hao Wang (Guangzhou University, China), and Hanjun Li (Guangzhou University, China)</i>	
A Framework for Privacy Policy Enforcement for Connected Automotive Systems	1094
<i>Anis Bkakria (IRT SystemX, France) and Lydia Brika (IRT SystemX, France)</i>	
Cropping Resilient Secret Image Sharing Scheme with Lossless Recovery	1103
<i>Shengyang Luo (National University of Defense Technology, China), Yaqi Liu (National University of Defense Technology, China), Xuehu Yan (National University of Defense Technology, China), and Chao Huang (National University of Defense Technology, China)</i>	
Robustness and Privacy for Green Learning Under Noisy Labels	1111
<i>De Li (Guangxi Normal University, China), Tiange Xia (Guangxi Normal University, China), Qiyu Li (Guangxi Normal University, China), Xianxian Li (Guangxi Normal University, China), and Jinyan Wang (Guangxi Normal University, China)</i>	
SecGAN: Honest-Majority Maliciously 3PC Framework for Privacy-Preserving Image Synthesis ..	1119
<i>Yuting Yang (National University of Defense Technology (NUDT), Changsha, China), Lin Liu (National University of Defense Technology (NUDT), Changsha, China), Shaojing Fu (National University of Defense Technology (NUDT), Changsha, China), Jun-Jie Huang (National University of Defense Technology (NUDT), Changsha, China), and Yuchuan Luo (National University of Defense Technology (NUDT), Changsha, China)</i>	
BAA: A Novel Decentralized Authorization System for Privacy-Sensitive Medical Data	1127
<i>Cong Zha (Tsinghua University, China), Yulei Wu (Exeter University, UK), Zexun Jiang (Communication University of China, China), Wenqian Zhao (University of North Texas, United States), and Hao Yin (Tsinghua University, China)</i>	

Session TrustCom_17: Emerging Technologies

Robustness Assessment of Biometric Authenticators	1137
<i>Romain Dagnas (IRT SystemX, France), Anis Bkakria (IRT SystemX, France), and Reda Yaich (IRT SystemX, France)</i>	

MEDICALHARM - A Threat Modeling Designed for Modern Medical Devices	1147
<i>Emmanuel Kwarteng (Marquette University) and Mumin Cebe (Marquette University)</i>	
SharpEye: Identify mKCP Camouflage Traffic Through Feature Optimization	1157
<i>Yuwei Xu (Southeast University, China; Purple Mountain Laboratories for Network and Communication Security, China; Engineering Research Center of Blockchain Application, Supervision and Management, China), Zhizhi Zhu (Southeast University, China; Engineering Research Center of Blockchain Application, Supervision and Management, China), Yunpeng Bai (Southeast University, China; Engineering Research Center of Blockchain Application, Supervision and Management, China), Lilanyi Wu (Southeast University, China; Engineering Research Center of Blockchain Application, Supervision and Management, China), Kehui Song (Nankai University, China), and Guang Cheng (Southeast University, China; Purple Mountain Laboratories for Network and Communication Security, China)</i>	
RUE: Realising Unlearning from the Perspective of Economics	1165
<i>Mingjian Tang (University of Technology Sydney, Australia), Weiqi Wang (University of Technology Sydney, Australia), Chenhan Zhang (University of Technology Sydney, Australia), and Shui Yu (University of Technology Sydney, Australia)</i>	
MENDER: Multi-Level Feature Fusion Discovery Framework for Exposed ICS Remote Management Devices in the Wild	1173
<i>Liuxing Su (Institute of Information Engineering, Chinese Academy of Sciences; University of Chinese Academy of Sciences, China), Zhenzhen Li (Institute of Information Engineering, Chinese Academy of Sciences; University of Chinese Academy of Sciences, China), Gaopeng Gou (Institute of Information Engineering, Chinese Academy of Sciences; University of Chinese Academy of Sciences, China), Zhen Li (Institute of Information Engineering, Chinese Academy of Sciences; University of Chinese Academy of Sciences, China), Gang Xiong (Institute of Information Engineering, Chinese Academy of Sciences; University of Chinese Academy of Sciences, China), and Chengshang Hou (Institute of Information Engineering, Chinese Academy of Sciences; University of Chinese Academy of Sciences, China)</i>	
Fine-Grained Task Scheduling Combining DDPG and Path Selection in LEO Satellite Networks ..	1181
<i>Gaowei Zhang (Computer Network Information Center, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Xu Zhou (Computer Network Information Center, Chinese Academy of Sciences, China), and Xiaobo Zhang (China Academy of Electronics and Information Technology, China)</i>	
Affinity-Based Resource and Task Allocation in Edge Computing Systems	1187
<i>Wenbing Zou (Beijing Information Science and Technology University), Xiulei Liu (Beijing Information Science and Technology University), Shoulu Hou (Beijing Information Science and Technology University), Ye Zhang (Beijing Information Science and Technology University), Lin Miao (Beijing Information Science and Technology University), Yi Gong (Beijing Information Science and Technology University), and Ning Li (Beijing Information Science and Technology University)</i>	

Look Closer to Touch Behavior-Enabled Android Pattern Locks: A Study in the Wild	1196
<i>Gergely Tuskó (Technical University of Denmark, Denmark), Weizhi Meng (Technical University of Denmark, Denmark), and Brooke Lampe (Technical University of Denmark, Denmark)</i>	
Distributed Dependent Task Offloading in CPU-GPU Heterogenous MEC: A Federated Reinforcement Learning Approach	1206
<i>Hualong Huang (University of Electronic Science and Technology of China, China), Zhekai Duan (University of Edinburgh, UK), Wenhan Zhan (University of Electronic Science and Technology of China, China), Yichen Liu (University of Electronic Science and Technology of China, China), Zhi Wang (University of Electronic Science and Technology of China, China), and Zitian Zhao (University of Electronic Science and Technology of China, China)</i>	
LWVN:A Lightweight Virtual Network View Method to Defend Lateral Movement	1214
<i>Degang Sun (Computer Network Information Center, Chinese Academy of Sciences, China), Guokun Xu (Institute of Information Engineering, Chinese Academy of Sciences, China; Chinese Academy of Sciences, China), Weijie Wang (Institute of Information Engineering, Chinese Academy of Sciences, China; Chinese Academy of Sciences, China), Yan Wang (Institute of Information Engineering, Chinese Academy of Sciences, China; Chinese Academy of Sciences, China), Qiuqian Lv (Institute of Information Engineering, Chinese Academy of Sciences, China; Chinese Academy of Sciences, China), Xinxing Zhou (Institute of Information Engineering, Chinese Academy of Sciences, China), and Zhiqi Li (State Grid Cyber Security Technology (Beijing), China)</i>	

The International Symposium on Intelligent and Trustworthy Computing, Communications, and Networking (ITCCN-2023)

Session ITCCN _01: Trustworthy and Secure AI

Membership Inference Attacks Against GNN-Based Hardware Trojan Detection	1222
<i>Kento Hasegawa (KDDI Research, Inc., Japan), Kazuki Yamashita (Waseda University, Japan), Seira Hidano (KDDI Research, Inc., Japan), Kazuhide Fukushima (KDDI Research, Inc., Japan), Kazuo Hashimoto (Waseda University, Japan), and Nozomu Togawa (Waseda University, Japan)</i>	
Analysing Utility Loss in Federated Learning with Differential Privacy	1230
<i>Anastasia Pustozero (SBA Research, Austria), Jan Baumbach (University of Hamburg, Germany), and Rudolf Mayer (SBA Research, Austria)</i>	
Ripple20 Vulnerabilities Detection using a Featureless Deep Learning Model	1236
<i>Sarah Binhulayyil (Cardiff University, UK; King Saud University, KSA) and Shancang Li (Cardiff University, UK)</i>	
ConFunc: Enhanced Binary Function-Level Representation Through Contrastive Learning	1241
<i>Longfei Li (Zhengzhou University, China), Xiaokang Yin (Information Engineering University, China), Xiao Li (Information Engineering University, China), Xiaoya Zhu (Information Engineering University, China), and Shengli Liu (Information Engineering University, China)</i>	

TGCN-DA: A Temporal Graph Convolutional Network with Data Augmentation for High Accuracy Insider Threat Detection	1249
<i>Ximing Li (Beijing University of Posts and Telecommunications, China), Linghui Li (Beijing University of Posts and Telecommunications, China), Xiaoyong Li (Beijing University of Posts and Telecommunications, China), Binsi Cai (Beijing University of Posts and Telecommunications, China), and Bingyu Li (Beihang University, China)</i>	
EFwork: An Efficient Framework for Constructing a Malware Knowledge Graph	1258
<i>Chen Chen (Beihang University, China), Chunhe Xia (Beihang University, China; Guangxi Normal University, China), Tianbo Wang (Beihang University, China; Shanghai Key Laboratory of Computer Software Evaluating and Testing, China), Wanshuang Lin (Beihang University, China), Yuan Zhao (Beihang University, China), and Yang Li (Beihang University, China)</i>	
Temporal-Gated Graph Neural Network with Graph Sampling for Multi-Step Attack Detection ..	1266
<i>Shuyu Chen (Jiangnan University, China), Dawei Lin (Inspur Software Co., Ltd., China), Zhenping Xie (Jiangnan University, China), and Hongbo Wang (TRS Topwalk Information Techology Co., Ltd., China)</i>	
GBTrust: Leveraging Edge Attention in Graph Neural Networks for Trust Management in P2P Networks	1272
<i>Badr Bellaj (Samovar Laboratory), Aafaf Ouaddah (INPT, France), Abdellatif Mezrioui (INPT, France), Noel Crespi (Samovar Laboratory), and Emmanuel Bertin (Orange lab, France)</i>	
On-Graph Machine Learning-Based Fraud Detection in Ethereum Cryptocurrency Transactions .	1279
<i>Helen Milner (The University of Adelaide, Australia), Redowan Mahmud (Curtin University, Australia), Mahbuba Afrin (Curtin University, Australia), Sashowta G. Siddhartha (Macquarie University, Australia), Sajib Mistry (Curtin University, Australia), and Aneesh Krishna (Curtin University, Australia)</i>	
CWGAN-GP: Fuzzing Testcase Generation Method Based on Conditional Generative Adversarial Network	1286
<i>Zhongyuan Qin (Southeast University, China), Jiarong Fan (Southeast University, China), Zeru Li (Southeast University, China), Xujian Liu (Southeast University, China), and Xin Sun (State Grid Zhejiang Electric Power Co., Ltd. Research Institute, China)</i>	

Session ITCCN _02: Blockchain and Distributed Ledger

Pooling Under the Sun: A Mining Pool Centralized Revisit and Solution	1294
<i>Kundu Chen (Beihang University, China) and Jie Luo (Beihang University, China)</i>	
A Practical and Privacy-Preserving Vehicular Data Sharing Framework by using Blockchain	1300
<i>Xu Yang (Xi'an Jiaotong University, China), Ao Wang (Xi'an Jiaotong University, China), Qiu hao Wang (Xi'an Jiaotong University, China), Saiyu Qi (Xi'an Jiaotong University, China), and Yong Qi (Xi'an Jiaotong University, China)</i>	

EPPVChain: An Efficient Privacy-Preserving Verifiable Query Scheme for Blockchain Databases	1306
<i>Jingxian Cheng (Xi'an Jiaotong University, China), Saiyu Qi (Xi'an Jiaotong University, China), Yong Qi (Xi'an Jiaotong University, China), Jianfeng Wang (Xidian University, China), Qin Jiang (Xi'an Jiaotong University, China), and Di Wu (Xi'an Jiaotong University, China)</i>	
Enhancing Tunnel Safety for Dangerous Goods Vehicles Through Blockchain-Based Time-Stamping	1312
<i>Karolina Bak (Wroclaw University of Science and Technology, Poland), Hannes Salin (Swedish Transport Administration, Sweden), Karol Niczyj (Wroclaw University of Science and Technology, Poland), and Łukasz Krzywiecki (Wroclaw University of Science and Technology, Poland)</i>	
Referable NFT-Based Revenue Allocation Mechanism in Data Marketplace	1318
<i>Hui Zhao (Inner Mongolia University, China; Hohhot Minzu College, China), Xiaodong Zhang (Inner Mongolia University, China), Jinshan Shi (Inner Mongolia University, China), and Ru Li (Inner Mongolia University, China)</i>	
A Secure Blockchain-Based Authentication and Key Agreement Protocol for 5G Roaming	1324
<i>Awaneesh Kumar Yadav (Indian Institute of Technology Roorkee, India), Manoj Misra (Indian Institute of Technology Roorkee, India), An Braeken (Vrije Universiteit Brussel, Belgium), and Madhusanka Liyanage (University College Dublin, Ireland)</i>	
Chrisimos: A Useful Proof-of-Work for Finding Minimal Dominating Set of a Graph	1332
<i>Diptendu Chatterjee (BITS Pilani K K Birla Goa Campus, India), Prabal Banerjee (Avail and Indian Statistical Institute, India), and Subhra Mazumdar (TU Wien, CDL-BOT, Austria)</i>	
Blockchain-Based and Privacy-Preserving Data Collection for Vehicular Crowdsensing	1340
<i>Xionghu Yu (Capital Normal University, China), Xiaolan Tang (Capital Normal University, China), and Wenlong Chen (Capital Normal University, China)</i>	
BC-FL k-Means: A Blockchain-Based Framework for Federated Clustering	1348
<i>Mina Alishahi (Open Universiteit, The Netherlands), Wouter Leeuw (Eindhoven University of Technology, The Netherlands), and Nicola Zannone (Eindhoven University of Technology, The Netherlands)</i>	
Secure Decentralized Identity Management using Blockchain	1355
<i>Sandeep Srivastava (Indian Institute of Information Technology, Lucknow India), Deepshikha Agarwal (Indian Institute of Information Technology, Lucknow India), and Brijesh Chaurasia (Pranveer Singh Institute of Technology Kanpur, India)</i>	
A Novel Blockchain-Based Decentralized Multi-Party Certificate Management Framework	1361
<i>Shalitha Wijethilaka (University College Dublin, Ireland), Awaneesh Kumar Yadav (Indian Institute of Technology Roorkee, India), An Braeken (Vrije Universiteit Brussel, Belgium), and Madhusanka Liyanage (University College Dublin, Ireland)</i>	

Session ITCCN _03: Network and System Security (I)

Access Control Based on CRDTs for Collaborative Distributed Applications	1369
<i>Pierre-Antoine Rault (Université de Lorraine, France), Claudia-Lavinia Ignat (Université de Lorraine, France), and Olivier Perrin (Université de Lorraine, France)</i>	
Putting a Padlock on Lambda – Integrating vTPMs into AWS Firecracker	1377
<i>Melker Veltman (Chalmers University of Technology, Sweden), Alexandra Parkegren (Chalmers University of Technology, Sweden), and Victor Morel (Chalmers University of Technology, Sweden)</i>	
Phish and Chips: Language-Agnostic Classification of Unsolicited Emails	1385
<i>Carlos Gañán (Office of the CTO, ICANN), Siôn Lloyd (Office of the CTO, ICANN), and Samaneh Tajalizadehkhoob (Office of the CTO, ICANN)</i>	
Evaluation of Decision Tree-Based Rule Derivation for Intrusion Detection in Automotive Ethernet	1392
<i>Felix Gail (Fraunhofer SIT \ ATHENE, Germany), Roland Rieke (Independent researcher, Germany), Florian Fenzl (Fraunhofer SIT \ ATHENE, Germany), and Christoph Krauß (Darmstadt University of Applied Sciences, Germany)</i>	
The Impact of EMI on Security Access Control in Datacenter Data Halls	1400
<i>Shahriar Saadat (University of Washington, USA)</i>	
Physical Layer Secure Communication Based on MIMO Channel Constellation Flipping	1408
<i>Tong Gao (Institute of Information Engineering Chinese Academy of Sciences, China) and Xianhui Lu (Institute of Information Engineering Chinese Academy of Sciences, China)</i>	
Channel-Robust Radio Frequency Fingerprint Identification for LTE Devices with Hybrid Feature	1416
<i>Haichuan Peng (Southeast University, China), Linning Peng (Southeast University, China; Purple Mountain Laboratories for Network and Communication Security, China), Hua Fu (Southeast University, China; Purple Mountain Laboratories for Network and Communication Security, China), Lingnan Xie (Southeast University, China), Junxian Shi (Southeast University, China), and Wentao Jing (Southeast University, China)</i>	
Zero Trust Score-Based Network-Level Access Control in Enterprise Networks	1422
<i>Leonard Bradatsch (Ulm University, Germany), Oleksandr Miroshkin (Ulm University, Germany), Nataša Trkulja (Ulm University, Germany), and Frank Kargl (Ulm University, Germany)</i>	

Session ITCCN _04: Network and System Security (II)

A Contextual Derivation Algorithm for Cybersecurity in IoT Environments	1430
<i>Abdul Qadir Khan (Institut Supérieur d'Électronique de Paris (ISEP), France; Sorbonne University, France), Nouredine Tamani (Institut Supérieur d'Électronique de Paris (ISEP), France), Saad El Jaouhari (Institut Supérieur d'Électronique de Paris (ISEP), France), and Lina Mroueh (Institut Supérieur d'Électronique de Paris (ISEP), France)</i>	

Generating Synthetic Tabular Data for DDoS Detection using Generative Models	1436
<i>Samed Saka (University of Liverpool, United Kingdom), Ali Al-Ataby (University of Liverpool, United Kingdom), and Valerio Selis (University of Liverpool, United Kingdom)</i>	
Network Attack Identification and Analysis Based on Graph Convolutional Neural Network	1443
<i>Xingyu Wang (Zhongyuan University of Technology, China), Kun Wen (zhongyuan university of technology, China), and Yingdan Zhang (zhongyuan university of technology, China)</i>	
Be Like a Chameleon: Protect Traffic Privacy with Mimicry	1449
<i>Zexiao Zou (Beijing Electronic Science and Technology Institute, China), Yan Zhang (Beijing Electronic Science and Technology Institute, China), Jin Chen (Beijing Electronic Science and Technology Institute, China), Jianyi Zhang (Beijing Electronic Science and Technology Institute, China), Zhiqiang Wang (Beijing Electronic Science and Technology Institute, China), Lei Ju (Beijing Electronic Science and Technology Institute, China), and Ri Xu (Beijing Electronic Science and Technology Institute, China)</i>	
Enhancing IoT Security: Novel Mechanisms for Malware Detection using HPCs and Neural Networks	1455
<i>Shashwat Adhikari (University of Plymouth), Hafizul Asad (University of Plymouth), and Kevin Jones (University of Plymouth)</i>	
A Novel Approach for Trajectory Partition Privacy in Location-Based Services	1464
<i>Chundong Wang (Tianjin University of Technology, China) and Yongxin Zhao (Tianjin University of Technology, China)</i>	
Guardians of DNS Integrity: A Remote Method for Identifying DNSSEC Validators Across the Internet	1470
<i>Yevheniya Nosyk (Univ. Grenoble Alpes, CNRS, Grenoble INP, LIG, 38000 Grenoble, France), Maciej Korczyński (Univ. Grenoble Alpes, CNRS, Grenoble INP, LIG, 38000 Grenoble, France), and Andrzej Duda (Univ. Grenoble Alpes, CNRS, Grenoble INP, LIG, 38000 Grenoble, France)</i>	
Don't Get Hijacked: Prevalence, Mitigation, and Impact of Non-Secure DNS Dynamic Updates ...	1480
<i>Yevheniya Nosyk (Univ. Grenoble Alpes, CNRS, Grenoble INP, LIG, France), Maciej Korczyński (Univ. Grenoble Alpes, CNRS, Grenoble INP, LIG, France), Carlos H. Gañán (TU Delft, The Netherlands), Michał Król (University of London, The Netherlands), Qasim Lone (RIPE NCC, The Netherlands), and Andrzej Duda (Univ. Grenoble Alpes, CNRS, Grenoble INP, LIG, France)</i>	

Session ITCCN_05: Network and System Security (III)

TorKameleon: Improving Tor's Censorship Resistance with K-Anonymization and Media-Based Covert Channels	1490
<i>Afonso Vilalonga (Universidade NOVA de Lisboa), João S. Resende (Universidade do Porto), and Henrique Domingos (Universidade NOVA de Lisboa)</i>	

A Dynamic Network-Based Intrusion Detection Model for Industrial Control Systems	1496
<i>Paulo R. de Oliveira (Pontifical Catholic University of Paraná, Brazil), Altair Olivo Santin (Pontifical Catholic University of Paraná, Brazil), Pedro Horchulhack (Pontifical Catholic University of Paraná, Brazil), Eduardo K. Viegas (Pontifical Catholic University of Paraná, Brazil), and Everton de Matos (Technology Innovation Institute (TII), United Arab Emirates)</i>	
Attacks Against Mobility Prediction in 5G Networks	1502
<i>Syafiq Al Atiiq (Lund University, Sweden), Yachao Yuan (Lund University, Sweden), Christian Gehrman (Lund University, Sweden), Jakob Sternby (Ericsson Research, Sweden), and Luis Barriga (Ericsson Research, Sweden)</i>	
Analysis and Comparison of Delay Tolerant Network Security Issues and Solutions	1512
<i>Jingwen Su (Inner Mongolia University, China), Xiangyu Bai (Inner Mongolia University, China), and Kexin Zhou (Inner Mongolia University, China)</i>	
Securing Zero Trust Networks: the Decentralized Host-to-Host Authentication Policy Enforcement	1518
<i>Adam Spanier (School of Interdisciplinary Informatics, USA), Rui Zhao (School of Interdisciplinary Informatics, USA), and Pei-Chi Huang (Department of Computer Science, University of Nebraska, USA)</i>	
Protocol Aware Unsupervised Network Intrusion Detection System	1524
<i>Ritesh Ratti (Indian Institute of Technology Guwahati, India), Sanasam Ranbir Singh (Indian Institute of Technology Guwahati, India), and Sukumar Nandi (Indian Institute of Technology Guwahati, India)</i>	
A Public Key Infrastructure for 5G Service-Based Architecture	1532
<i>Ayush Kumar (Singapore Technologies Engineering, Singapore) and Vrizlynn L.L. Thing (Singapore Technologies Engineering, Singapore)</i>	
Access Control for Interoperable Energy Management Systems using Verifiable Credentials	1540
<i>Nikos Fotiou (Athens University of Economics and Business, Greece), Spiros Chadoulos (Athens University of Economics and Business, Greece), Iordanis Koutsopoulos (Athens University of Economics and Business, Greece), Vasilios A. Siris (Athens University of Economics and Business, Greece), and George C. Polyzos (Athens University of Economics and Business, Greece)</i>	
HF-Mid: A Hybrid Framework of Network Intrusion Detection for Multi-Type and Imbalanced Data	1546
<i>Weidong Zhou (Beihang University, China), Tianbo Wang (Beihang University, China; Shanghai Key Laboratory of Computer Software Evaluating and Testing, China), Guotao Huang (Beihang University, China), Xiaopeng Liang (Beihang University, China), Chunhe Xia (Beihang University, China; Guangxi Normal University, China), and Xiaojian Li (Guangxi Normal University, China)</i>	

Session ITCCN _06: Computer and Data Security (I)

Survey of Malware Analysis Through Control Flow Graph using Machine Learning	1554
<i>Shaswata Mitra (Mississippi State University), Stephen A. Torri (Mississippi State University), and Sudip Mittal (Mississippi State University)</i>	
Secure Traversable Event Logging for Responsible Identification of Vertically Partitioned Health Data	1562
<i>Sunanda Bose (Simula Research Laboratory, Oslo, Norway) and Dusica Marijan (Simula Research Laboratory, Oslo, Norway)</i>	
MATH - Finding and Fixing Exploits in Algorand	1572
<i>Peter Ince (Monash University, Australia), Xiapu Luo (The Hong Kong Polytechnic University, Hong Kong), Jiangshan Yu (Monash University, Australia), Joseph K. Liu (Monash University, Australia), and Xiaoning Du (Monash University, Australia)</i>	
CamPass: a Secure Camera-Based Password Manager for Kiosk Browsing	1580
<i>Rui Zhao (University of Nebraska at Omaha)</i>	
Generating Optimized Universal Adversarial Watermark for Preventing Face Deepfake	1586
<i>Kaiqi Lv (Communication University of China, China), Weiguo Lin (Communication University of China, China), Junfeng Xu (Communication University of China, China), Wanshan Xu (Communication University of China, China), Shuren Chen (Communication University of China, China), and ShengWei Yi (CNITSEC, China)</i>	
Keyword Spotting in the Homomorphic Encrypted Domain using Convolution Decomposition ...	1592
<i>Chenyu Dong (Sun Yat-sen University, China), Peijia Zheng (Sun Yat-sen University, China), and Weiqi Luo (Sun Yat-sen University, China)</i>	
Semantic-Driven Focused Crawling using LASER and FAISS: A Novel Approach for Threat Detection and Improved Information Retrieval	1598
<i>Prasasthy Balasubramanian (University of Oulu), Justin Seby (University of Oulu), and Panos Kostakos (University of Oulu)</i>	
Code Execution Capability as a Metric for Machine Learning-Assisted Software Vulnerability Detection Models	1606
<i>Daniel Grahm (Wright State University, USA), Lingwei Chen (Wright State University, USA), and Junjie Zhang (Wright State University, USA)</i>	
A Fine-Grained Access Control Mechanism Based on Search Trees	1614
<i>Xianxia Zou (Jinan University, China), Cenyu Zheng (Jinan University, China), Haodong Lin (Jinan University, China), Like Du (Jinan University, China), Weitou Xu (Jinan University, China), and Chong He (Jinan University, China)</i>	

Session ITCCN _07: Computer and Data Security (II)

Apt Detection of Ransomware - An Approach to Detect Advanced Persistent Threats using System Call Information	1621
<i>Rudra Prasad Baksi (Illinois State University, USA), Vishwas Nalka (University at Buffalo, USA), and Shambhu Upadhyaya (University at Buffalo, USA)</i>	

A Survey on the Principles of Persuasion as a Social Engineering Strategy in Phishing	1631
<i>Kalam Khadka (University of Canberra, Australia), Abu Barkat Ullah (University of Canberra, Australia), Wanli Ma (University of Canberra, Australia), Elisa Martinez Morroquin (University of Canberra, Australia), and Yibeltal Alem (University of Canberra, Australia)</i>	
Inj-Kyber: Enhancing CRYSTALS-Kyber with Information Injection Within a Bio-KEM Framework	1639
<i>Junwei Yu (The University of Tokyo, Japan), Yepeng Ding (The University of Tokyo, Japan), Yuheng Guo (The University of Tokyo, Japan), Kentaro Kotani (The University of Tokyo, Japan), and Hiroyuki Sato (The University of Tokyo, Japan)</i>	
A New Design for Self-Encryption	1645
<i>Roland Kromes (Delft University of Technology, Netherlands), João Rodrigues (INOV - Instituto de Engenharia de Sistemas e Computadores Inovação, Portugal), Duarte Nascimento (INOV - Instituto de Engenharia de Sistemas e Computadores Inovação, Portugal), Gonçalo Cadete (INOV - Instituto de Engenharia de Sistemas e Computadores Inovação, Portugal), François Verdier (Université Côte d'Azur - LEAT, France), and Kaitai Liang (Delft University of Technology, Netherlands)</i>	
Dynamic Searchable Scheme with Forward Privacy for Encrypted Document Similarity	1653
<i>Mustafa A. Al Sibahee (Shenzhen University, PR China), Chengwen Luo (Shenzhen University, PR China), Jin Zhang (Shenzhen University, PR China), Yijing Huang (Shenzhen University, PR China), and Zaid Ameen Abduljabbar (University of Basrah, Iraq; Huazhong University of Science and Technology, China)</i>	
LiPI: Lightweight Privacy-Preserving Data Aggregation in IoT	1661
<i>Himanshu Goyal (Indian Institute of Technology, India), Krishna Kodali (Indian Institute of Technology, India), and Sudipta Saha (Indian Institute of Technology, India)</i>	
Dynamic Security Parameters for Multichannel Secret Sharing Protocols	1667
<i>David Pineda Reyes (Wheaton College, Wheaton), Josiah Hsu (Wheaton College, Wheaton), Claire Wagner (Wheaton College, Wheaton), and Devin Pohly (Wheaton College, Wheaton)</i>	
Static-RWArmor: A Static Analysis Approach for Prevention of Cryptographic Windows Ransomware	1673
<i>Md. Ahsan Ayub (Tennessee Tech University, USA), Ambareen Siraj (Tennessee Tech University, USA), Bobby Filar (Sublime Security, Inc., USA), and Maanak Gupta (Tennessee Tech University, USA)</i>	
Malware Detection using Contrastive Learning Based on Multi-Feature Fusion	1681
<i>Kailu Guo (Beijing University of Posts and Telecommunications, China), Yang Xin (Beijing University of Posts and Telecommunications, China), and Tianxiang Yu (Beijing University of Posts and Telecommunications, China)</i>	

Session ITCCN _08: Computer and Data Security (III)

Model-Driven Security Analysis of Self-Sovereign Identity Systems	1687
<i>Yepeng Ding (The University of Tokyo, Japan) and Hiroyuki Sato (The University of Tokyo, Japan)</i>	
WiDeS: Wiping Detection using System-Calls - An Anti-Forensic Resistant Approach	1695
<i>Pranitha Sanda (University of Hyderabad Centre for Emerging Networks and Cloud Computing, Institute for Development and Research in Banking Technology, India), Digambar Pawar (University of Hyderabad, India), and Radha Vedala (Centre for Emerging Networks and Cloud Computing, Institute for Development and Research in Banking Technology, India)</i>	
ECC Implementation and Performance Evaluation for Securing OPC UA Communication	1704
<i>Alexandra Tidrea (University Politehnica Timisoara, Romania) and Adrian Korodi (University Politehnica Timisoara, Romania)</i>	
LPA: A Lightweight PUF-Based Authentication Protocol for IoT System	1712
<i>Vikash Kumar Rai (National Forensic Sciences University, Goa, India), Somanath Tripathy (Indian Institute of Technology Patna, India), and Jimson Mathew (Indian Institute of Technology Patna, India)</i>	
Practical Privacy-Preserving Ride Sharing Protocol with Symmetric Key	1718
<i>Sara Ramezani (Lund University, Sweden) and Christian Gehrman (Lund University, Sweden)</i>	
EMD-SCS: A Dynamic Behavioral Approach for Early Malware Detection with Sonification of System Call Sequences	1728
<i>Raghav Bhardwaj (Brock University, Canada), Morteza Nofereesti (Brock University, Canada), Madeline Janecek (Brock University, Canada), and Naser Ezzati-Jivan (Brock University, Canada)</i>	
On the Adoption of Homomorphic Encryption by Financial Institutions	1738
<i>Michela Iezzi (Bank of Italy, Italy), Carsten Maple (The Alan Turing Institute, U.K.), and Danilo A. Giannone (Gener8, UK)</i>	
Anomaly Based Malware Threat Detection on Linux Systems	1744
<i>Jayanthi Ramamoorthy (Sam Houston State University, Huntsville), Narasimha K Shashidhar (Sam Houston State University, Huntsville), and Bing Zhou (Sam Houston State University, Huntsville)</i>	
Challenges and Considerations in Data Recovery from Solid State Media: A Comparative Analysis with Traditional Devices	1751
<i>Aidan Spalding (Edinburgh Napier University, United Kingdom), Zhiyuan Tan (Edinburgh Napier University, United Kingdom), and Kehinde O. Babaagba (Edinburgh Napier University, United Kingdom)</i>	

Session ITCCN _09: Privacy and Trust

Understanding Privacy Concerns in Mobile Health Applications: A Scenario-Based Online Survey	1757
<i>Reham Al Tamime (Qatar Computing Research Institute, Qatar), Ali Farooq (University of Strathclyde, UK), Joni Salminen (University of Vaasa, Finland), Vincent Marmion (Bournemouth University, UK), and Wendy Hall (University of Southampton, UK)</i>	

Trustworthy Execution in Untrustworthy Autonomous Systems	1766
<i>David Halasz (Masaryk University, Czech Republic), Suyash Shandilya (Masaryk University, Czech Republic), and Barbora Buhnova (Masaryk University, Czech Republic)</i>	
Survey on Recognition of Privacy Risk from Responding on Twitter	1774
<i>Toru Nakamura (Usable Trust Group, KDDI Research, Inc., Japan), Yukiko Sawaya (Usable Trust Group, KDDI Research, Inc., Japan), and Takamasa Isohara (Usable Trust Group, KDDI Research, Inc., Japan)</i>	
A Trustworthiness Evaluation Mechanism Based on Beta Distribution Under Selected Conditions	1781
<i>Kewei Guo (Queen's University of Belfast, United Kingdom) and Xuefei Li (Inner Mongolia University, China)</i>	
FlexAuth: A Decentralized Authorization System with Flexible Delegation	1790
<i>Ziyu Fei (Institute of Computing Technology, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Ying Li (Institute of Computing Technology, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Jiuqi Wei (Institute of Computing Technology, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Yufan Fu (Institute of Computing Technology, Chinese Academy of Sciences, China; University of Chinese Academy of Sciences, China), Botao Peng (Institute of Computing Technology, Chinese Academy of Sciences, China), and Xiaodong Li (Institute of Computing Technology, Chinese Academy of Sciences, China)</i>	
Privacy-Preserving Detection Method for Transmission Line Based on Edge Collaboration	1798
<i>Quan Shi (University of Electronic Science and Technology of China, China) and Kaiyuan Deng (University of Electronic Science and Technology of China, China)</i>	
Trust Assessment of a Darknet Marketplace	1806
<i>Florian Platzer (Fraunhofer SIT, ATHENE, Germany) and York Yannikos (Fraunhofer SIT, ATHENE, Germany)</i>	

Session ITCCN _10: Emerging Technologies

An Interactive Web Portal for Customised Telerehabilitation in Neurological Care	1814
<i>M A Hannan Bin Azhar (Canterbury Christ Church University, UK), Zoltán Mészáros (King's College London, UK), Tasmina Islam (King's College London, UK), and Soumya K. Manna (Canterbury Christ Church University Canterbury, UK)</i>	

Matrix Platform: Empowering Smart Ports with Advanced Video Analytics for Enhanced Security, Safety, and Efficiency	1822
<i>Brendan Black (Ulster University, Northern Ireland), Philip Perry (Ulster University, Northern Ireland), Joseph Rafferty (Ulster University, Northern Ireland), Claudia Cristina (British Telecom, England), Tom Bowman (British Telecom, England), Cathryn Peoples (Ulster University, Northern Ireland), Andrew Ennis (Ulster University, Northern Ireland), Andrew Reeves (British Telecom, England), Nektarios Georgalas (British Telecom, England), Adrian Moore (Ulster University, Northern Ireland), and Bryan Scotney (Ulster University, Northern Ireland)</i>	
CGPNet: Enhancing Medical Image Classification Through Channel Grouping and Partial Convolution Network	1827
<i>Kairen Chen (Guangzhou University, China), Shuhong Chen (Guangzhou University, China), Guojun Wang (Guangzhou University, China), and Chenchen Wang (Guangzhou University, China)</i>	
DOPS: A Practical Dual Offline Payment Scheme of CBDC for Mobile Devices	1835
<i>Bo Yang (Bank Card Test Center, China; Beijing Unionpay Card Technology Co., Ltd, China), Yanchao Zhang (Bank Card Test Center, China; Beijing Unionpay Card Technology Co., Ltd, China), and Dong Tong (Bank Card Test Center, China; Beijing Unionpay Card Technology Co., Ltd, China)</i>	
Android Malicious Application Detection Based on Improved Mayfly Algorithm	1845
<i>Yinzhen Wei (Wuhan Textile University) and Shuo Lu (Wuhan Textile University)</i>	
Game Theory-Based Trade-Off Analysis for Privacy and Openness in Decision Making by Controlling Quantity of Information	1853
<i>Mohd Anuaruddin Bin Ahmadon (Yamaguchi University, Japan), Shingo Yamaguchi (Yamaguchi University, Japan), and Alireza Jolfaei (Flinders University, Australia)</i>	
Leveraging Hardware Performance Counters for Efficient Classification of Binary Packers	1859
<i>Erika Leal (Tulane University), Binin Cheng (Shandong University), TuQuynh Nguyen (University of Texas at Arlington), Alfredo Gutierrez Garcia (University of Texas at Arlington), Nathan Cabero (University of Texas at Arlington), and Jiang Ming (Tulane University)</i>	

Session ITCCN _11: Internet-of-Things

IoT Device Lifecycle Management	1865
<i>Nektarios Georgalas (British Telecom, England), Andrew Ennis (Ulster University, Northern Ireland), Cathryn Peoples (Ulster University, Northern Ireland), Joseph Rafferty (Ulster University, Northern Ireland), Philip Perry (Ulster University, Northern Ireland), Claudia Cristina (British Telecom, England), Brendan Black (Ulster University, Northern Ireland), Adrian Moore (Ulster University, Northern Ireland), Tom Bowman (British Telecom, England), Bryan Scotney (Ulster University, Northern Ireland), and Andrew Reeves (British Telecom, England)</i>	

UAV Bluetooth Communication Link Assessment for Emergency Response Applications	1871
<i>Brendan Black (Ulster University, Northern Ireland), Joseph Rafferty (Ulster University, Northern Ireland), Jose Santos (Ulster University, Northern Ireland), and Andrew Ennis (Ulster University, Northern Ireland)</i>	
Actionable Contextual Explanations for Cyber-Physical Systems	1879
<i>Sanjiv Subodhnarayan Jha (University of St.Gallen, Switzerland), Simon Mayer (University of St.Gallen, Switzerland), and Kimberly Garcia (University of St.Gallen, Switzerland)</i>	
Proactive Device Management for the Internet of Things	1887
<i>Tom Bowman (Research and Network Strategy, British Telecom, United Kingdom), Nektarios Georgalas (Research and Network Strategy, British Telecom, United Kingdom), Andrew Reeves (Research and Network Strategy, British Telecom, United Kingdom), Andrew Ennis (Ulster University, Ireland), Cathryn Peoples (Ulster University, Ireland), Brendan Black (Ulster University, Ireland), Fadi El-Moussa (Research and Network Strategy, British Telecom, United Kingdom), and Adrian Moore (Ulster University, Ireland)</i>	
Python Subset to Digital Logic Dataflow Compiler for Robots and IoT	1893
<i>Kristaps Jurkans (University of Lincoln, UK) and Charles Fox (University of Lincoln, UK)</i>	
I2Map: IoT Device Attestation using Integrity Map	1900
<i>Imran Makhdoom (University of Technology Sydney, Australia), Mehran Abolhasan (University of Technology Sydney, Australia), Justin Lipman (University of Technology Sydney, Australia), Daniel Franklin (University of Technology Sydney, Australia), and Massimo Piccardi (University of Technology Sydney, Australia)</i>	
A Near-Field EM Sensor Implemented in FPGA Configurable Fabric	1908
<i>Can Aknesil (KTH Royal Institute of Technology, Sweden), Elena Dubrova (KTH Royal Institute of Technology, Sweden), Niklas Lindskog (Ericsson AB, Sweden), and Håkan Englund (Ericsson AB, Sweden)</i>	

The 15th International Workshop on Cyberspace Security and Artificial Intelligence (CAI-2023)

Stealthy Rootkits vs Low-Power IoT Devices: A Process-Level Colonel Blotto Game	1914
<i>Talal Halabi (Université Laval, Canada)</i>	
Multi-Step Prediction of LTE-R Communication Quality Based on CA-TCN and Differential Evolution	1919
<i>Jiantao Qu (China Railway Design Corporation, Tianjin, China), Chunyu Qi (China Railway Design Corporation, Tianjin, China), Gaoyun An (Beijing Jiaotong University, Beijing, China), and He Meng (China Railway Design Corporation, Tianjin, China)</i>	
Machine Learning-Based BGP Traffic Prediction	1925
<i>Talaya Farasat (University of Passau, Germany), Muhammad Ahmad (Northwestern University, USA), Akmal Khan (The Islamia University of Bahawalpur, Pakistan), JongWon Kim (GIST, South Korea), and Joachim Posegga (University of Passau, Germany)</i>	

The 7th International Workshop on Applications of AI, Cyber Security and Economics Data Analytics (ACE-2023)

Detecting Masquerading Traitors from Process Visualization of Computer Usage	1935
<i>Martin Macak (Masaryk University, Czechia), Radek Ošlejšek (Masaryk University, Czechia), and Barbora Buhnova (Masaryk University, Czechia)</i>	
Automatic Scam-Baiting using ChatGPT	1941
<i>Piyush Bajaj (University of Bristol, UK) and Matthew Edwards (University of Bristol, UK)</i>	
A Novel Network flow Feature Scaling Method Based on Cloud-Edge Collaboration	1947
<i>Zeyi Li (Nanjing University of Posts and Telecommunications, China), Ze Zhang (Nanjing University of Posts and Telecommunications, China), Mengyi Fu (Nanjing University of Posts and Telecommunications, China), and Pan Wang (Nanjing University of Posts and Telecommunications, China)</i>	
A Comprehensive Machine Learning Methodology for Embedded Systems PHM	1954
<i>Juliano Pimentel (University of Derby, UK), Alistair A. McEwan (University of Derby, UK), and Hong Qing Yu (University of Derby, UK)</i>	
Literature Study on Bias and Fairness in Machine Learning Systems	1960
<i>Qaizar Bamboat (University of Derby, United Kingdom) and Hong Qing Yu (University of Derby, United Kingdom)</i>	

International Workshop on Advanced Technology for Space-Air-Ground Integrated Information Networks 2023 (SAGIINAT-2023)

Deep Reinforcement Learning Based Interference Avoidance Beam-Hopping Allocation Algorithm in Multi-Beam Satellite Systems	1966
<i>Haonan Wang (Institute of Software, Chinese Academy of Sciences, China), Lixiang Liu (Institute of Software, Chinese Academy of Sciences, China), Xin Zhou (Institute of Software, Chinese Academy of Sciences, China), Lexi Xu (China United Network Communications Group, China), Guangyang Wu (Institute of Software Chinese Academy of Sciences, China), and Shuaijun Liu (Institute of Software, Chinese Academy of Sciences, China)</i>	
A Low Complexity And Efficient Algorithm for LEO Satellite Routing	1974
<i>Hao Wang (College of Information Science and Electronic Engineering, Zhejiang University, China), Yun Liu (Academy for Network & Communications of China Electronics Technology Group Corporation, China), Zhiqun Song (Academy for Network & Communications of China Electronics Technology Group Corporation, China; Intelligent Network Research Center, China), Bing Hu (College of Information Science and Electronic Engineering, Zhejiang University, China), Zikai Wang (Academy for Network & Communications of China Electronics Technology Group Corporation, China), Ruiling Song (Academy for Network & Communications of China Electronics Technology Group Corporation, China), and Pei Xiao (University of Surrey, UK)</i>	

Multiple Chord Distance Regression Algorithm to Judge Constellations Without Prior Information	1980
<i>Wenli Yan (Institute of Software Chinese Academy of Sciences, China), Shuaijun Liu (Institute of Software Chinese Academy of Sciences, China), and Lixiang Liu (Institute of Software Chinese Academy of Sciences, China)</i>	
Simulation of Space-Borne Digital Phased Array Antenna	1986
<i>Jifeng Liu (Research Institute, China United Network Communications Corporation Limited, China), Yao Zhou (Research Institute, China United Network Communications Corporation Limited, China), Cheng Wang (Beijing University of Posts and Telecommunications, China), Yingnan Liu (Research Institute, China United Network Communications Corporation Limited, China), and Fuchang Li (Research Institute, China United Network Communications Corporation Limited, China)</i>	
Optimization Method for LEO Constellation Frequency Compatibility Simulation Parameters	1991
<i>Xiang Gao (National Space Science Center, Chinese Academy of Sciences, China), Jiangyin Fu (National Space Science Center, Chinese Academy of Sciences, China), Xiujian Yao (National Space Science Center, Chinese Academy of Sciences, China), and Yi Yan (National Space Science Center, Chinese Academy of Sciences, China)</i>	
Coexistence Analysis Between the Large-Scale IMT Systems and LEO Satellite Communication Systems	1993
<i>Yuqian Cai (Beijing University of Posts and Telecommunication, China), Cheng Wang (Beijing University of Posts and Telecommunication, China), Xiaoqian Wang (Beijing University of Posts and Telecommunication, China), Xiaoyan Zhao (Beijing University of Posts and Telecommunication, China), and Weidong Wang (Beijing University of Posts and Telecommunication, China)</i>	
Coexistence Analysis of 10-10.5 GHz IMT and EESS (passive) Systems	1999
<i>Xiaoqian Wang (Key Laboratory of Universal Wireless Communications, Ministry of Education, Beijing; Beijing University of Posts and Telecommunications, Beijing), Cheng Wang (Key Laboratory of Universal Wireless Communications, Ministry of Education, Beijing; Beijing University of Posts and Telecommunications, Beijing), Yuqian Cai (Key Laboratory of Universal Wireless Communications, Ministry of Education, Beijing; Beijing University of Posts and Telecommunications, Beijing), Xiaoyan Zhao (Key Laboratory of Universal Wireless Communications, Ministry of Education, Beijing; Beijing University of Posts and Telecommunications, Beijing), and Weidong Wang (Key Laboratory of Universal Wireless Communications, Ministry of Education, Beijing; Beijing University of Posts and Telecommunications, Beijing)</i>	
Service-Driven Shared QoS Orchestration for Satellite-Ground Integrated Networks	2005
<i>Lin Lin (China Unicom Research Institute, China), Bin Zhu (China Unicom Research Institute, China), Zelin Wang (China Unicom Research Institute, China), Guangquan Wang (China Unicom Research Institute, China), and Kaichu Xing (China Unicom Research Institute, China)</i>	

Constellation Autonomy Modeling for Agile on-Orbit Communication and Computing	2012
<i>Shoufeng Wang (AsiaInfo Technologies (China) INC., China), Hua-Min Chen (Beijing University of Technology, China), Ye Ouyang (AsiaInfo Technologies (China) INC., China), Fan Li (China Unicom Beijing Branch, China), Xuan Chen (China Unicom Beijing, China), Jianchao Guo (AsiaInfo Technologies (China) INC., China), Yun Li (AsiaInfo Technologies (China) INC., China), Sen Bian (AsiaInfo Technologies (China) INC., China), Xidong Wang (AsiaInfo Technologies (China) INC., China), and Zhidong Ren (AsiaInfo Technologies (China) INC., China)</i>	
Analyzing Land Cover and Land Use Changes Using Remote Sensing Techniques: A Temporal Analysis of Climate Change Detection with Google Earth Engine	2018
<i>Mozina Afzal (Balochistan University of Information Technology Engineering and Management Sciences, Pakistan), Kamran Ali (Middlesex University London, UK), Mumraiz Khan Kasi (Balochistan University of Information Technology Engineering and Management Sciences, Pakistan), Masood Ur Rehman (University of Glasgow, UK), Mohammad Ali Khoshkholgh (Middlesex University London, UK), Bushra Haq (Balochistan University of Information Technology Engineering and Management Sciences, Pakistan), and Syed Ahmed Shah (Lahore University of Management Sciences, Pakistan)</i>	
Application Scenarios of Confidential Computing in Satellite Internet	2024
<i>Jie Ren (China Unicom Research Institute, China), Lin Lin (China Unicom Research Institute, China), Miao Xue (China Unicom Research Institute, China), and Zelin Wang (China Unicom Research Institute, China)</i>	

The 5th International Workshop on AI-driven Network 2023 (AINet-2023)

Design and Implementation of Digital Consulting Capability Platform Based on Knowledge Sharing	2030
<i>Zhen Guo (State Key Laboratory of Media Convergence and Communication, Communication University of China, China; China Unicom Smart City Research Institute, China), Pengzhou Zhang (State Key Laboratory of Media Convergence and Communication, Communication University of China, China), Lexi Xu (China Unicom Research Institute, China), Peng Liang (China Unicom Smart City Research Institute, China), and Shuwei Yao (China Unicom Smart City Research Institute, China)</i>	
RedCap In-Depth Research and Market Development Prospect	2036
<i>Jinhu Shen (China Mobile Group Design Institute Co., Ltd., China), Rui Wang (China Mobile Group Hebei Co., Ltd., China), Mingjie Yang (China Mobile Group Design Institute Co., Ltd., China), Liang Cui (China Mobile Group Hebei Co., Ltd., China), Ao Shen (China Mobile Group Design Institute Co., Ltd., China), Bao Guo (China Mobile Group Design Institute Co., Ltd., China), Jiayu Li (China Mobile Group Design Institute Co., Ltd., China), Yuan Fang (China Mobile Group Design Institute Co., Ltd., China), Pengcheng Liu (China Mobile Group Design Institute Co., Ltd., China), and Jimin Ling (China Mobile Group Design Institute Co., Ltd., China)</i>	

Research on Interpretable Customer Churn Prediction Based on Attention Mechanism	2042
<i>Bin Yang (China Unicom Research Institute, China), Jing Liang (Beijing University of Posts and Telecommunications, China), Yubin Chen (Beijing University of Posts and Telecommunications, China), Ying Xing (Beijing University of Posts and Telecommunications, China), Wei Gao (China Unicom Research Institute, China), Yue Wang (China Unicom Research Institute, China), Lexi Xu (China Unicom Research Institute, China), and Xinzhou Cheng (China Unicom Research Institute, China)</i>	
Method for Dual-Path Upgrade in a Leaked Signal Indoor Distribution System in 5G Network	2048
<i>Bao Guo (China Mobile Communication Group Design Institute Co., Ltd, China), Lufei Zhang (South China University of Technology, China), Jinge Guo (University of Warwick, UK), Jinhua Shen (China Mobile Communication Group Design Institute Co., Ltd, China), Shumin Jiang (China Mobile Communication Group Design Institute Co., Ltd, China), and Pengcheng Liu (China Mobile Communication Group Design Institute Co., Ltd, China)</i>	
SSF-EDZL Scheduling Algorithm on Heterogeneous Multiprocessors	2052
<i>Peng Wu (Institute of Big Data Science and Industry, Shanxi University, China), Chengzhuo Han (Shanxi University, China), Tao Yan (Institute of Big Data Science and Industry, Shanxi University, China), Lu Chen (Institute of Big Data Science and Industry, Shanxi University, China), Tianhao Guo (Shanxi University, China), and Zhi Li (Shanxi University, China)</i>	
Evaluation of Distributed Collaborative Learning Approach for 5G Network Data Analytics Function	2058
<i>Shoufeng Wang (Asiainfo Technologies (CHINA), INC., China), Hua-Min Chen (Beijing University of Technology, Beijing, China), Ye Ouyang (Asiainfo Technologies (CHINA), INC., China), Fan Li (China Unicom Beijing Branch, Beijing, China), Xuan Chen (China Unicom, China), Limeng Ma (Asiainfo Technologies (CHINA), INC., China), Zhanwu Li (Asiainfo Technologies (CHINA), INC., China), Sen Bian (Asiainfo Technologies (CHINA), INC., China), and Zhidong Ren (Asiainfo Technologies (CHINA), INC., China)</i>	
Research on Cross-Layer Alarm Association in 5G Core Network	2064
<i>Dongyue Zhang (China Unicom Research Institute, China), Sai Han (China Unicom Research Institute, China), Zelin Wang (China Unicom Research Institute, China), Jingwei Wang (China United Network Communications Company Limited Beijing Branch, China), Guangquan Wang (China Unicom Research Institute, China), and Jieyan Yang (China United Network Communications Group Company Limited, China)</i>	
The Research and Implementation of Optical Cable Fault Location Method Based on Navigation..	2070
<i>Ao Li (China Unicom Research Institute, China), Sai Han (China Unicom Research Institute, China), Zelin Wang (China Unicom Research Institute, China), Guangquan Wang (China Unicom Research Institute, China), Zhi Qiao (China United Network Communications Group Company Limited, China), and Songtao Ni (China Information Technology Designing & Consulting Institute Co., Ltd. Zhengzhou Branch, China)</i>	

User Relationship Discovery Based on Telecom Data	2076
<i>Yue Wang (China Unicom Research Institute, China), Wei Gao (China Unicom Research Institute, China), Xinzhou Cheng (China Unicom Research Institute, China), Xin Wang (China Unicom Research Institute, China), Lexi Xu (China Unicom Research Institute, China), Siwei Wang (China Unicom, Full Customer Operation Center, China), Yuanguang Wang (China Unicom, Full Customer Operation Center, China), Fanyu Meng (China Unicom, Full Customer Operation Center, China), and Kunyan Li (Beijing University of Posts and Telecommunications, China)</i>	
A Big Data Sharing Architecture Based on Federal Learning in State Grid	2082
<i>Na Liu (Beijing Smartchip Microelectronics Technology Co. Ltd, China), Rui Yang (Beijing Smartchip Microelectronics Technology Co. Ltd, China), Zhicheng Zang (Beijing Smartchip Microelectronics Technology Co. Ltd, China), Yu Wang (Beijing Smartchip Microelectronics Technology Co. Ltd, China), Chao Wu (Beijing Smartchip Microelectronics Technology Co. Ltd, China), Xiaofei Li (Beijing Smartchip Microelectronics Technology Co. Ltd, China), Zhendong Li (State Grid Leshan Electric Power Supply Company, China), and Meng Li (State Grid Meishan Electric Power Supply Company, China)</i>	
Research on the Construction of Information System Stability Guarantee Capability	2087
<i>Pengwei Ma (China Academy of Information and Communications Technology, China) and Chaolun Wang (China Academy of Information and Communications Technology, China)</i>	
Research on Distributed Database Stability Testing Platform Based on Chaos Engineering	2092
<i>Chaolun Wang (China Academy of Information and Communications Technology, China), Jiaxing Yang (China Academy of Information and Communications Technology, China), Xiaolu Han (China Academy of Information and Communications Technology, China), Jianrui Ma (China Academy of Information and Communications Technology, China), Siyuan Liu (China Academy of Information and Communications Technology, China), and Pengwei Ma (China Academy of Information and Communications Technology, China)</i>	

The 10th International Workshop on Big Data Research and Application 2023 (BDRA-2023)

Session BDRA_01: Big Data Application

Multi-Granularity Cross-Attention Network for Visual Question Answering	2098
<i>Yue Wang (China Unicom Institute, China), Wei Gao (China Unicom Research Institute, China), Xinzhou Cheng (China Unicom Research Institute, China), Xin Wang (China Unicom Research Institute, China), Huiying Zhao (China Unicom Research Institute, China), Zhipu Xie (China Unicom Research Institute, China), and Lexi Xu (China Unicom Research Institute, China)</i>	

An Analysis Strategy of Abnormal Subscriber Warning Based on Federated Learning Technology.....	2104
<i>Jie Gao (Research Institute, China United Network Communications Corporation, China), Tianyi Wang (Research Institute, China United Network Communications Corporation, China), Yuhui Han (Research Institute, China United Network Communications Corporation, China), Lixia Liu (China United Network Communications Corporation Qinghai Branch, China), Xingwei Zhang (China United Network Communications Corporation Ningxia Branch, China), Lexi Xu (Research Institute, China United Network Communications Corporation, China), Yang Wu (Research Institute, China United Network Communications Corporation, China), Zijing Yang (Research Institute, China United Network Communications Corporation, China), and Chen Cheng (Research Institute, China United Network Communications Corporation, China)</i>	
Medical Image Recognition Technology Based On Fusion Of Faster-RCNN And SSD	2110
<i>Yuwen Huo (Southwest University, China), Song Wu (Southwest University, China), and Mingde Huo (China United Network Communications Corporation, China)</i>	
Vulnerability Name Prediction Based on Enhanced Multi-Source Domain Adaptation	2115
<i>Ying Xing (Beijing University of Posts and Telecommunications, China; Nanjing University of Aeronautics and Astronautics, China; Yunnan Key Laboratory of Software Engineering, China), Mengci Zhao (Beijing University of Posts and Telecommunications, China; Nanjing University of Aeronautics and Astronautics, China; Yunnan Key Laboratory of Software Engineering, China), Bin Yang (China Unicom Research Institute, China), Yuwei Zhang (Peking University, China), Wenjin Li (NSFOCUS Technologies Group Co., Ltd., China), Jiawei Gu (NSFOCUS Technologies Group Co., Ltd., China), Jun Yuan (NSFOCUS Technologies Group Co., Ltd., China), and Lexi Xu (China Unicom Research Institute, China)</i>	
An AI-Driven Dockerized Lightweight Framework for Smart Home Service Orchestration	2122
<i>Zhaoning Wang (China Unicom Research Institute, China), Jiajia Zhu (China Unicom Research Institute, China), Bo Cheng (Beijing University of Posts and Telecommunications, China), Xinzhou Cheng (China Unicom Research Institute, China), Feibi Lyu (China Unicom Research Institute, China), Guoping Xu (China Unicom, China), Jinjian Qiao (China Unicom Research Institute, China), Lu Zhi (China Unicom Research Institute, China), and Tian Xiao (China Unicom Research Institute, China)</i>	

Proactive Operation and Maintenance for 5G Networks Based on Complaint Prediction	2128
<i>Feibi Lyu (Research Institute, China United Network Communications Corporation, China), Ning Meng (Group Company, China United Network Communications Corporation, China), Yuhui Han (Research Institute, China United Network Communications Corporation, China), Jinjian Qiao (Research Institute, China United Network Communications Corporation, China), Zhipu Xie (Research Institute, China United Network Communications Corporation, China), Xinzhou Cheng (Research Institute, China United Network Communications Corporation, China), Lexi Xu (Research Institute, China United Network Communications Corporation, China), Zhaoning Wang (Research Institute, China United Network Communications Corporation, China), and Guoping Xu (Group Company, China United Network Communications Corporation, China)</i>	
Automatic Intelligent Chronic Kidney Disease Detection in Healthcare 5.0	2134
<i>Geng Tian (081 Electronic Group Co., Ltd, China), Amir Rehman (Southwest Jiaotong University, China), Huanlai Xing (Southwest Jiaotong University, China), Li Feng (Southwest Jiaotong University, China), Nighat Gulzar (Southwest Jiaotong University, China), and Abid Hussain (Southwest Jiaotong University, China)</i>	
TrustedBench: An Efficient and User-Friendly Distributed Performance Testing Tool for Blockchain System	2141
<i>Yang Cheng (China Academy of Information and Communications Technology Cloud Computing and Big Data Research Institute Beijing, China), Kai Wei (China Academy of Information and Communications Technology Cloud Computing and Big Data Research Institute Beijing, China), Yihui Zhang (China Academy of Information and Communications Technology Cloud Computing and Big Data Research Institute Beijing, China), Chunyu Jiang (China Academy of Information and Communications Technology Cloud Computing and Big Data Research Institute Beijing, China), Weiwei Pang (China Academy of Information and Communications Technology Cloud Computing and Big Data Research Institute Beijing, China), Qi Zhang (China Academy of Information and Communications Technology Cloud Computing and Big Data Research Institute Beijing, China), Bin Liu (China Academy of Information and Communications Technology Cloud Computing and Big Data Research Institute Beijing, China), Lifeng Zhang (China Academy of Information and Communications Technology Cloud Computing and Big Data Research Institute Beijing, China), Tingting Liu (China Academy of Information and Communications Technology Cloud Computing and Big Data Research Institute Beijing, China), and Yinqian Wu (China Academy of Information and Communications Technology Cloud Computing and Big Data Research Institute Beijing, China)</i>	
Assessing the Value of Data Assets: An Exploratory Study of Valuation Methods	2147
<i>Bohuan Ai (China Academy of Information and Communications Technology, China), Yufei Li (China Academy of Information and Communications Technology, China), Wenda Ma (China Academy of Information and Communications Technology, China), Mengyuan Qiu (China Academy of Information and Communications Technology, China), and Miao Liu (China Academy of Information and Communications Technology, China)</i>	

A Cooperative Lane Change Method for Connected and Automated Vehicles Based on Reinforcement Learning	2152
<i>Fanqiang Meng (Jilin University, P.R.China), Jian Wang (Jilin University, P.R.China), and Boxiong Li (Jilin University, P.R.China)</i>	

Session BDRA_02: Big Data Research

Research on Enterprises Growth for Industries in Post-Epidemic Era	2158
<i>Heng Zhang (Research Institute, China United Network Communications Corporation, China), Bing Yan (China Unicom Vsens Telecommunications Corporation, China), Yunpeng Li (China International Advertising Corporation, China), Lexi Xu (Research Institute, China United Network Communications Corporation, China), Xinzhou Cheng (Research Institute, China United Network Communications Corporation, China), Lijuan Cao (Research Institute, China United Network Communications Corporation, China), Kun Chao (Research Institute, China United Network Communications Corporation, China), Wei Xia (Fintech group, Global Tone Communication Technology Corporation, China), and Qinqin Yu (Fintech group, Global Tone Communication Technology Corporation, China)</i>	
Research on Data Security for Vehicle-Infrastructure-Cloud Integration	2164
<i>Yunlu Yang (Key Laboratory of Internet of Vehicle Technical Innovation and Testing(CAICT), Ministry of Industry and Information Technology, China Academy of Information and Communications Technology, China), Miaoqiong Wang (China Academy of Information and Communications Technology, China), Yuming Ge (Key Laboratory of Internet of Vehicle Technical Innovation and Testing(CAICT), Ministry of Industry and Information Technology, China Academy of Information and Communications Technology, China), and Rundong Yu (Key Laboratory of Internet of Vehicle Technical Innovation and Testing(CAICT), Ministry of Industry and Information Technology, China Academy of Information and Communications Technology, China)</i>	
Research on DataOps Capability - Practice and Development	2170
<i>Zheng Yin (China Academy of Information and Communications Technology, China), Shengwen Zhou (China Academy of Information and Communications Technology, China), Jingjing Zhou (China Academy of Information and Communications Technology, China), Minghui Tian (China Academy of Information and Communications Technology, China), Musen Lin (China Academy of Information and Communications Technology, China), and Sida Liu (China Academy of Information and Communications Technology, China)</i>	
Research on Operation Evolution of 5G Non-Public Network	2175
<i>Kun Chao (China Unicom Research Institute, China), Zhen Xing (China Unicom Research Institute, China), Xinzhou Cheng (China Unicom Research Institute, China), Jian Guan (China Unicom Research Institute, China), Lexi Xu (China Unicom Research Institute, China), Xiqing Liu (China Unicom Research Institute, China), Yuwei Jia (China Unicom Research Institute, China), and Lijuan Cao (China Unicom Research Institute, China)</i>	

Research on Diagnosis System of 5G Data Service Latency Problem	2181
<i>Jinjian Qiao (China Unicom Research Institute, China), Guoping Xu (China Unicom, China), Ning Meng (China Unicom, China), Feibi Lyu (China Unicom Research Institute, China), Xinzhou Cheng (China Unicom Research Institute, China), Jijia Zhu (China Unicom Research Institute, China), Lexi Xu (China Unicom Research Institute, China), and Liang Liu (China Unicom Research Institute, China)</i>	
Research on Assessment System for Blockchain	2187
<i>Weiwei Pang (China Academy of Information and Communications Technology, China Academy of Information and Communications Technology, China), Kai Wei (China Academy of Information and Communications Technology, China Academy of Information and Communications Technology, China), Yihui Zhang (China Academy of Information and Communications Technology, China Academy of Information and Communications Technology, China), Chunyu Jiang (China Academy of Information and Communications Technology, China Academy of Information and Communications Technology, China), Yang Cheng (China Academy of Information and Communications Technology, China Academy of Information and Communications Technology, China), Qi Zhang (China Academy of Information and Communications Technology, China Academy of Information and Communications Technology, China), Bin Liu (China Academy of Information and Communications Technology, China Academy of Information and Communications Technology, China), Lifeng Zhang (China Academy of Information and Communications Technology, China Academy of Information and Communications Technology, China), Tingting Liu (China Academy of Information and Communications Technology, China Academy of Information and Communications Technology, China), and Yinqian Wu (China Academy of Information and Communications Technology, China Academy of Information and Communications Technology, China)</i>	
Development Situation and Suggestions of Data Elements in China	2193
<i>Shu Yan (China Academy of Information and Communications Technology, China), Sirui Zhang (China Academy of Information and Communications Technology, China), Ailin Lv (China Academy of Information and Communications Technology, China), Bo Yuan (China Academy of Information and Communications Technology, China), and Kai Wei (China Academy of Information and Communications Technology, China)</i>	
Research on Technology and Industry Situation of Lakehouse	2198
<i>Yanmei Liu (China Academy of Information and Communications Technology, China), Pengwei Ma (China Academy of Information and Communications Technology, China), and Jiafeng Tian (China Academy of Information and Communications Technology, China)</i>	
Research on Technologies in Data Fabric	2204
<i>Qingyuan Hu (China Mobile Information Technology Center, China), Zheng Yin (China Academy of Information and Communications Technology, China), Tao Tao (China Mobile Information Technology Center, China), Jibin Wang (China Mobile Information Technology Center, China), Zhuo Chen (China Mobile Information Technology Center, China), Bohuan Ai (China Academy of Information and Communications Technology, China), Yu Liu (China Mobile Information Technology Center, China), and Chongzhou Liu (China Mobile Information Technology Center, China)</i>	

Research on Development of Data Disaster Recovery System	2210
<i>Jiafeng Tian (Research Institute, China Academy of Information and Communications Technology, China), Pengwei Ma (Research Institute, China Academy of Information and Communications Technology, China), Chaolun Wang (Research Institute, China Academy of Information and Communications Technology, China), and Zhuo Wang (Research Institute, China Academy of Information and Communications Technology, China)</i>	

The 5th International Workshop on Machine Learning assisted Smart System (MLSys-2023)

Leveraging Oversampling Techniques in Machine Learning Models for Multi-Class Malware Detection in Smart Home Applications	2216
<i>Abdullahi Chowdhury (The University of Adelaide, Adelaide, Australia), Mohammad Manzurul Islam (East West University Bangladesh, Dhaka, Bangladesh), Shahriar Kaisar (RMIT University, Melbourne, Australia), Mahbub E Khoda (Federation University Australia, Churchill, Australia), Ranesh Naha (Federation University Australia, Churchill, Australia), Mohammad Ali Khoshkholghi (Middlesex University, London, UK), and Mahdi Aiash (Middlesex University, London, UK)</i>	
EasyOrchestrator: A Dynamic QoS-Aware Service Orchestration Platform for 6G Network	2222
<i>Yi Yue (China Unicom Research Institute, China; National Engineering Research Center of Next Generation Internet Broadband Service Application, China), Zhiyan Zhang (China Unicom Research Institute, China; National Engineering Research Center of Next Generation Internet Broadband Service Application, China), Chang Cao (China Unicom Research Institute, China; National Engineering Research Center of Next Generation Internet Broadband Service Application, China), Xiongyan Tang (China Unicom Research Institute, China; National Engineering Research Center of Next Generation Internet Broadband Service Application, China), Wencong Yang (China Unicom Research Institute, China; National Engineering Research Center of Next Generation Internet Broadband Service Application, China; Zhengzhou University, China), and Feile Li (China Unicom Research Institute, China; National Engineering Research Center of Next Generation Internet Broadband Service Application, China; Zhengzhou University, China)</i>	

A Novel Algorithm and System of Customer Value Evaluation Based on Telecom Operator Big Data	2228
<i>Chen Cheng (Research Institute, China United Network Communications Corporation, China), Xinzhou Cheng (Research Institute, China United Network Communications Corporation, China), Jinyou Dai (China Information Communication Technology Group, China), Xu Xia (China Telecom Research Institute, China), Bin Yang (Research Institute, China United Network Communications Corporation, China), Feibi Lyu (Research Institute, China United Network Communications Corporation, China), Jie Gao (Research Institute, China United Network Communications Corporation, China), Wei Zhang (Research Institute, China United Network Communications Corporation, China), Tian Xiao (Research Institute, China United Network Communications Corporation, China), and Tianyi Wang (Research Institute, China United Network Communications Corporation, China)</i>	
5G/5G-A Private Network: Construction, Operation and Applications	2234
<i>Lexi Xu (China United Network Communications Corporation, China), Junsheng Zhao (China Association of Communication Enterprises, China), Hong Zhu (China National Institute of Standardization, China), Mingde Huo (Chongqing Branch, China United Network Communications Corporation, China), Xinzhou Cheng (China United Network Communications Corporation, China), Kun Chao (China United Network Communications Corporation, China), Jie Li (China United Network Communications Corporation, China), Jian Guan (China United Network Communications Corporation, China), Xiqing Liu (China United Network Communications Corporation, China), and Jie Gao (China United Network Communications Corporation, China)</i>	
Elastic Digital Twin Network Modeling Toward Restraining Resource Occupation	2240
<i>Shoufeng Wang (AsiaInfo Technologies (China) INC., China), Hua-Min Chen (Beijing University of Technology, China), Ye Ouyang (AsiaInfo Technologies (China) INC., China), Fan Li (China Unicom Beijing Branch, China), Xuan Chen (China Unicom, China), Jianchao Guo (AsiaInfo Technologies (China) INC., China), Yun Li (AsiaInfo Technologies (China) INC., China), Sen Bian (AsiaInfo technologies (China) INC., China), Xidong Wang (AsiaInfo Technologies (China) INC., China), and You Lu (AsiaInfo Technologies (China) INC., China)</i>	
An Improved Lightweight Linear K-Value Transformer	2246
<i>Anyan Xiao (Shenyang Aerospace University, China), Zhuo Yan (Shenyang Aerospace University, China), Zheng Li (Shenyang Aerospace University, China), Huangxin Xu (Shenyang Aerospace University, China), HuiXuan Zheng (Shenyang Aerospace University, China), Yujie Ai (Shenyang Aerospace University, China), Xiaocong Zhang (Shenyang Aerospace University, China), Qixuan Sun (Shenyang Aerospace University, China), and Changyu Zhao (School of Artificial Intelligence, China)</i>	

FedQuant: Stock Prediction with Multi-Party Technical Indicators using Federated Learning Method in Quantitative Trading	2251
<i>Zijing Yang (China Unicom Research Institute, China), Lexi Xu (China Unicom Research Institute, China), Jie Gao (China Unicom Research Institute, China), Jie Li (China Unicom Research Institute, China), Yang Wu (China Unicom Research Institute, China), and Xinzhou Cheng (China Unicom Research Institute, China)</i>	
Design and Implementation of Mask Detection System Based on Improved YOLOv5s	2257
<i>Changyu Zhao (Shenyang Aerospace University, China), Zhuo Yan (Shenyang Aerospace University, China), Huangxin Xu (Shenyang Aerospace University, China), Xueliang Chen (Shenyang Aerospace University, China), Zheng Li (Shenyang Aerospace University, China), Xinyu Zhong (Shenyang Aerospace University, China), Cuiwei Liu (Shenyang Aerospace University, China), Anyan Xiao (Shenyang Aerospace University, China), and Xingyan Lv (Shenyang Aerospace University, China)</i>	
Address Localization Method Based on Data Fusion of Core Network and Radio Access Network	2263
<i>Tianyi Wang (Research Institute, China United Network Communication Group Co., Ltd, Beijing, China), Yuhui Han (Research Institute, China United Network Communication Group Co., Ltd, Beijing, China), Wei Zhang (Research Institute, China United Network Communication Group Co., Ltd, Beijing, China), Xinzhou Cheng (Research Institute, China United Network Communication Group Co., Ltd, Beijing, China), Jie Gao (Research Institute, China United Network Communication Group Co., Ltd, Beijing, China), Qingqing Zhang (Research Institute, China United Network Communication Group Co., Ltd, Beijing, China), Qijiao Yang (Qinghai Branch, China United Network Communication Group Co., Ltd, Xining, China), Fengqiang Chen (Qinghai Branch, China United Network Communication Group Co., Ltd, Xining, China), and Chen Cheng (Research Institute, China United Network Communication Group Co., Ltd, Beijing, China)</i>	
FLEvaluate: Robust Federated Learning Based on Trust Evaluate	2269
<i>Chao Guo (Beijing Electronic Science & Technology Institute, China), Buxin Guo (Beijing Electronic Science & Technology Institute, China), Tingting Zhu (Beijing Electronic Science & Technology Institute, China), Peihe Liu (Beijing Electronic Science & Technology Institute, China), and Cheng Gong (Unicom (Beijing) Industrial Internet Co., Ltd., China)</i>	
A Novel Uplink Coverage and Capacity Enhancement Scheme in NR TDD Network	2275
<i>Bao Guo (China Mobile Communication Group Design Institute Co., Ltd, China), Jinge Guo (University of Warwick, UK), Lufei Zhang (South China University of Technology, China), Yuan Fang (China Mobile Communication Group Design Institute Co., Ltd, China), Yingtao Meng (China Mobile Communication Group Design Institute Co., Ltd, China), and Jiayu Li (China Mobile Communication Group Design Institute Co., Ltd, China)</i>	

Smart Campus Construction Based on Telecom Operators Big Data	2280
<i>Runsha Dong (China United Network Communications Corporation, China), Xiaodong Cao (China United Network Communications Corporation, China), Chao Wang (China Communications Standards Association, China), Zhaoyang Sun (China National Institute of Standardization, China), Lexi Xu (China United Network Communications Corporation, China), Xin He (China United Network Communications Corporation, China), and Yang Wu (China United Network Communications Corporation, China)</i>	

The 17th IEEE International Conference on Big Data Science and Engineering 2023 (BigDataSE- 2023)

Ensemble Learning Models for Large-Scale Time Series Forecasting in Supply Chain	2286
<i>Minjuan Zhang (New Jersey Institute of Technology, USA), Chase Q. Wu (New Jersey Institute of Technology, USA), and Aiqin Hou (Northwest University, China)</i>	
A Big Data Science and Engineering Solution for Transit Performance Analytics	2295
<i>Nhu Minh Ngoc Pham (University of Manitoba, Canada), Yixi Wu (University of Manitoba, Canada), and Carson K. Leung (University of Manitoba, Canada)</i>	

The 26th IEEE International Conference on Computational Science and Engineering (CSE-2023)

Session CSE_01: Computational Science

Control Overhead Reduction using Length-Based Same Destination Aggregation for Large Scale Software Defined Networks in Next Generation Internet of Things	2303
<i>Mohammad Shahzad (University of Leicester, UK; University of Science and Technology Algiers, Algeria), Lu Liu (University of Leicester, UK; University of Science and Technology Algiers, Algeria), and Nacer Belkout (University of Leicester, UK; University of Science and Technology Algiers, Algeria)</i>	
Optimizing Quantum Reversible Circuits Using Reinforcement Learning	2310
<i>Sheng Yang (National Chung Hsing University, Taiwan) and Guan-Ju Peng (National Chung Hsing University, Taiwan)</i>	
Quantum Inspired Binary Atom Search Optimization Algorithm for Charging Station Placement Problem	2315
<i>Madathodika Asna (United Arab Emirates University , UAE), Hussain Shareef (United Arab Emirates University, UAE), and Achikkulath Prasanthi (United Arab Emirates University, UAE)</i>	
KrNER : A Novel Named Entity Recognition Method Based on Knowledge Enhancement and Remote Supervision	2323
<i>Jinhua Du (Beijing National Research Center for Information Science and Technology at Tsinghua University, China) and Hao Yin (Beijing National Research Center for Information Science and Technology at Tsinghua University, China)</i>	

KLDP: A Data Profiling Technique Based on Knowledge Graph and Large Language Modeling ..	2333
<i>Jinhua Du (Beijing National Research Center for Information Science and Technology at Tsinghua University, China) and Hao Yin (Beijing National Research Center for Information Science and Technology at Tsinghua University, China)</i>	
Fast Text Classification using Lean Gradient Descent Feed Forward Neural Network for Category Feature Augmentation	2341
<i>Joseph Attieh (Lebanese American University, Lebanon) and Joe Tekli (Lebanese American University, Lebanon)</i>	
Hybrid Multi-Objective Relinked GRASP for the Constrained Next Release Problem	2349
<i>Víctor Pérez-Piqueras (Universidad de Castilla-La Mancha), Pablo Bermejo (Universidad de Castilla-La Mancha), and José A. Gámez (Universidad de Castilla-La Mancha)</i>	
Stabilized Finite Element Approximation for The Transient Darcy-Brinkman-Forchheimer Model.	2357
<i>Rafael Cabral de Moura (Federal University of Espírito Santo, Brazil) and Lucia Catabriga (Federal University of Espírito Santo, Brazil)</i>	
Give and Take: Federated Transfer Learning for Industrial IoT Network Intrusion Detection	2365
<i>Lochana Telugu Rajesh (Anglia Ruskin University, UK), Tapadhir Das (University of the Pacific, USA), Raj Mani Shukla (Anglia Ruskin University, UK), and Shamik Sengupta (University of Nevada, USA)</i>	
Histopathological Image Classification and Vulnerability Analysis using Federated Learning.....	2372
<i>Sankalp Vyas (Anglia Ruskin University, Cambridge), Amar Nath Patra (Radford University, USA), and Raj Mani Shukla (Anglia Ruskin University, Cambridge)</i>	
High-Performance Object Serialization based on Ahead-of-Time Schema Generation	2378
<i>Filip Krakowski (Heinrich Heine University, Germany), Fabian Ruhland (RHeinrich Heine University, Germany), and Michael Schöttner (Heinrich Heine University, Germany)</i>	
Fast Fluid Antenna Multiple Access With Path Loss Consideration and Different Antenna Architecture	2386
<i>Halvin Yang (University College London (UCL), United Kingdom), Xiao Lin (University of Electronic Science and Technology of China, China), Kai-Kit Wong (University College London (UCL), United Kingdom), and Yizhe Zhao (University of Electronic Science and Technology of China, China)</i>	

Session CSE_02: Computational Engineering

Comparison of the Barriers to BIM Adoption and Digital Transformation within the Construction Industry of Pakistan and Ireland	2394
<i>Adhban Farea (Munster Technological University, Ireland), Moaaz Munir (The University of Lahore, Pakistan), Rahat Ullah (Munster Technological University, Ireland), Michal Otreba (Munster Technological University, Ireland), Sean Carroll (Munster Technological University, Ireland), and Joe Harrington (Munster Technological University, Ireland)</i>	

Clupiter: a Raspberry Pi Mini-Supercomputer for Educational Purposes	2400
<i>Alonso Rodríguez-Iglesias (Universidade da Coruña, Spain), María J. Martín (Universidade da Coruña, Spain), and Juan Touriño (Universidade da Coruña, Spain)</i>	
Transparent Network Acceleration for Big Data Computing in Java	2406
<i>Fabian Ruhland (Heinrich Heine University, Germany), Filip Krakowski (Heinrich Heine University, Germany), and Michael Schöttner (Heinrich Heine University, Germany)</i>	
MOFP: Multi-Objective Filter Pruning for Deep Learning Models	2414
<i>Jen-Chieh Yang (National Taiwan University, Taiwan), Hung-I Lin (National Taiwan University, Taiwan), Lin-Jing Kuo (National Taiwan University, Taiwan), and Sheng-De Wang (National Taiwan University, Taiwan)</i>	
A Hybrid Filter Pruning Method Based on Linear Region Analysis	2424
<i>Chang-Hsuan Hsieh (National Taiwan University, Taiwan), Jen-Chieh Yang (National Taiwan University, Taiwan), Hung-Yi Lin (National Taiwan University, Taiwan), Lin-Jing Kuo (National Taiwan University, Taiwan), and Sheng-De Wang (National Taiwan University, Taiwan)</i>	
Soft Hybrid Filter Pruning using a Dual Ranking Approach	2432
<i>Peng-Yu Chen (National Taiwan University, Taiwan), Jen-Chieh Yang (National Taiwan University, Taiwan), and Sheng-De Wang (National Taiwan University, Taiwan)</i>	
Ax-to-Grind Urdu: Benchmark Dataset for Urdu Fake News Detection	2440
<i>Sheetal Harris (Wuhan University, China), Liu Jinshuo (Wuhan University, China), Hassan Jalil Hadi (Wuhan University, China), and Yue Cao (Wuhan University, China)</i>	
Quantifying Nematodes Through Images: Datasets, Models, and Baselines of Deep Learning	2448
<i>Zhipeng Yuan (University of Sheffield, The United Kingdom), Nasamu Musa (RSK ADAS Ltd High Mowthorpe, The United Kingdom), Katarzyna Dybal (Harper Adams University, The United Kingdom), Matthew Back (Harper Adams University, The United Kingdom), Daniel Leybourne (University of Liverpool, The United Kingdom), and Po Yang (University of Sheffield, United Kingdom)</i>	
Towards Reliable Collaborative Data Processing Ecosystems: Survey on Data Quality Criteria.....	2456
<i>Louis Sahi (IRIT, Université de Toulouse, UT3, Toulouse, France), Romain Laborde (IRIT, Université de Toulouse, UT3, Toulouse, France), Mohamed-Ali Kandi (IRIT, Université de Toulouse, UT3, Toulouse, France), Michelle Sibilla (IRIT, Université de Toulouse, UT3, Toulouse, France), Giorgia Macilotti (IRIT, Université de Toulouse, UT3, CNRS, Toulouse, France), Benzekri Abdelmalek (IRIT, Université de Toulouse, UT3, Toulouse, France), and Afonso Ferreira (IRIT, Université de Toulouse, UT3, CNRS, Toulouse, France)</i>	
Railway Traffic Signal Recognition System Based on Spatio-Temporal Features	2465
<i>Hoahan Zhu (Trinity College Dublin, Ireland), Andrea Staino (Alstom, France), and Biswajit Basu (Trinity College Dublin, Ireland)</i>	
A Large-Scale Non-Standard English Database and Transformer-Based Translation System	2472
<i>Arghya Kundu (York University, Canada) and Uyen Trang Nguyen (York University, Canada)</i>	

Increasing User Seduction in E-commerce Community Interaction using the Participation Continuum	2480
<i>Jonathan Bishop (Crocels Research CIC Crocels Community Media Group)</i>	
<i>and Ashu M. G. Solo (Maverick Trailblazers Inc.)</i>	

The 21st IEEE International Conferences on Embedded and Ubiquitous Computing (EUC-2023)

Simulation for Trade-off Between Interference and Performance in a Bluetooth Low Energy Network	2488
<i>Bozheng Pang (KU Leuven, Belgium), Tim Claeys (KU Leuven, Belgium), Kristof T'Jonck (KU Leuven, Belgium), Jens Vankeirsbilck (KU Leuven, Belgium), Hans Hallez (KU Leuven, Belgium), and Jeroen Boydens (KU Leuven, Belgium)</i>	
Experimental Validation of Common Assumptions in Bluetooth Low Energy Interference Studies	2495
<i>Bozheng Pang (KU Leuven, Belgium), Jens Vankeirsbilck (KU Leuven, Belgium), Hans Hallez (KU Leuven, Belgium), and Jeroen Boydens (KU Leuven, Belgium)</i>	
HMAS: Enabling Seamless Collaboration Between Drones, Quadruped Robots, and Human Operators with Efficient Spatial Awareness	2503
<i>Amaury Saint-Jore (Université de Lorraine, France), Ye-Qiong Song (Université de Lorraine, France), and Laurent Ciarletta (Université de Lorraine, France)</i>	
Model-Based Development for ROS 2-Based Autonomous-Driving Software	2511
<i>Takumi Onozawa (Saitama University), Hiroshi Fujimoto (eSOL Co., Ltd.), and Takuya Azumi (Saitama University)</i>	
Performance Evaluation Framework for Arbitrary Nodes of Autonomous-Driving Systems	2520
<i>Yuta Tajima (Saitama University), Tatsuya Miki (Saitama University), and Takuya Azumi (Saitama University)</i>	
A Scalable Pattern Matching Implementation on Hardware using Data Level Parallelism	2530
<i>Hassan Jalil Hadi (Wuhan University, China), Khurram Shahzad (Wuhan University, China), Naveed Ahmed (Sultan University, Saudia Arabia), Yue Cao (Wuhan University, China), and Yasir Javed (Sultan University, Saudia Arabia)</i>	
Dynamic Split Computing-Aware Mixed-Precision Quantization for Efficient Deep Edge Intelligence	2538
<i>Naoki Nagamatsu (Tokyo Institute of Technology, Japan) and Yuko Hara-Azumi (Tokyo Institute of Technology, Japan)</i>	
A Mobile-First Disconnected Data Distribution Network	2546
<i>Shashank Hegde (San Jose State University, California), Deepak Munagala (San Jose State University, California), Aditya Singhania (San Jose State University, California), and Benjamin Reed (San Jose State University, California)</i>	
Trustworthy Insights: A Novel Multi-Tier Explainable Framework for Ambient Assisted Living...	2554
<i>Merlin Kasirajan (Canterbury Christ Church University, United Kingdom), M A Hannan Bin Azhar (Canterbury Christ Church University, United Kingdom), and Scott Turner (Canterbury Christ Church University, United Kingdom)</i>	

Dynamic Scheduling of AES Cores for Aperiodic Tasks on Multi-Tenant Cloud FPGAs	2562
<i>Stephen Donchez (Villanova University, USA) and Xiaofang Wang (Villanova University, USA)</i>	
Network Based Intrusion Detection using Time Aware LSTM Autoencoder	2570
<i>Ritesh Ratti (Indian Institute of Technology Guwahati, India), Sanasam Ranbir Singh (Indian Institute of Technology Guwahati, India), and Sukumar Nandi (Indian Institute of Technology Guwahati, India)</i>	

The 11th IEEE International Conference on Smart City and Informatization (iSCI-2023)

Towards a Context-Based Mobility Prediction in Smart Cities: First Experimentations	2579
<i>Boukhedouma Hocine (Research Center for Scientific and Technical Information, Algeria; University of Science and Technology Houari Boumediene, Algiers), Meziane Abdelkrim (Research Center for Scientific and Technical Information, Algeria), Hammoudi Slimane (ESEÖ-TECH - ERIS TEAM, France), Benna Amel (Research Center for Scientific and Technical Information, Algiers), and Hadjali Allel (University of Poitiers, France)</i>	

The 22nd International Conference on Ubiquitous Computing and Communications (IUCC-2023)

A Reliable Edge Server Placement Strategy Based on DDPG in the Internet of Vehicles	2587
<i>Zhou Zhou (Changsha University, China), Yonggui Han (Xi'an Technological University, China), Mohammad Shojafar (University of Surrey, UK), Zhongsheng Wang (Xi'an Technological University, China), and Jemal Abawajy (Deakin University, Australia)</i>	
Tabular Generative Adversarial Networks with an Enhanced Sampling Approach for High-Quality Cardiovascular Disease Dataset Generation	2595
<i>Malak Alqulaity (University of Sheffield) and Po Yang (University of Sheffield)</i>	
A Comparative Analysis of Federated Learning Techniques on On-Demand Platforms in Supporting Modern Web Browser Applications	2601
<i>Muhammad Senoyodha Brennaf (University of Sheffield, United Kingdom), Po Yang (University of Sheffield, United Kingdom), and Vitaveska Lanfranchi (University of Sheffield, United Kingdom)</i>	
A Deep Learning Model for Mobility Change Prediction Based on National Prevention and Control Policy	2607
<i>Shifeng Li (Yunnan University, China), Ruoling Peng (The University of Sheffield, United Kingdom), Po Yang (The University of Sheffield, United Kingdom), and Yun Yang (Yunnan University, China)</i>	
Pollutant Concentration Prediction Based on the Optimization of Long-Short Distance in Space	2615
<i>Muyao Peng (Xidian University, China), Kun Wang (Xidian University, China), and Yueli Wen (Xidian University, China)</i>	

Construction of Artificial Intelligence Generated Content in Digital Film Production	2621
<i>Jinning Wang (Beijing Film Academy, China), Xinyuan Huang (Communication University of China, China), Zichu Yang (Beijing Film Academy, China), and Weiran Zhao (Beijing Film Academy, China)</i>	
Design and Implementation of Intelligent Pet Feeding System	2629
<i>Qi Li (Jinling Institute of Science and Technology, China), Xinqi Shen (Jinling Institute of Science and Technology, China), Zhongkai Cheng (Jinling Institute of Science and Technology, China), and Yu Liu (Jinling Institute of Science and Technology, China)</i>	
Software Defined Networking flow Admission and Routing Under Minimal Security Constraints	2636
<i>Jorge López (Airbus, France), Charalampos Chatzinakis (Airbus, France), Marc Cartigny (Airbus, France), and Claude Poletti (Airbus, France)</i>	
Personalized Privacy-Preserving Semi-Centralized Recommendation System in a Trust-Based Agent Network	2644
<i>Qi Wen (University of Manitoba, Canada), Carson K. Leung (University of Manitoba, Canada), and Adam G.M. Pazdor (University of Manitoba, Canada)</i>	
DTrap: A Cyberattack-Defense Confrontation Technique Based on Moving Target Defense	2652
<i>Zheng Yang (Institute of Information Engineering, Chinese Academy of Sciences, China), Degang Sun (University of Chinese Academy of Sciences, China), Yan Wang (Institute of Information Engineering, Chinese Academy of Sciences, China), Xinbo Han (University of Chinese Academy of Sciences, China), Chen Meng (Institute of Information Engineering, Chinese Academy of Sciences, China), and Weiqing Huang (Institute of Information Engineering, Chinese Academy of Sciences, China)</i>	
Addressing a Malicious Tampering Attack on the Default Isolation Level in DBMS	2660
<i>Abdullah Alhajri (University of Warwick, UK) and Arshad Jhumka (University of Leeds, UK)</i>	
SmartLLM: A New Oracle System for Smart Contracts Calling Large Language Models	2668
<i>Zhenan Xu (Tsinghua University, China), Jiuzheng Wang (Beijing Institute of Technology, China), Cong Zha (Tsinghua University, China), Xinyi Li (Tsinghua University, China), and Hao Yin (Tsinghua University, China)</i>	

The 22nd International Conference on Computer and Information Technology (CIT-2023)

Lung Cancer Detection using Machine Learning Approach	2676
<i>Md Abrar Hamim (Daffodil International University Dhaka, Bangladesh), F.M. Tanmoy (Daffodil International University Dhaka, Bangladesh), Umme Fatema Tuj Asha (University of South Wales Wales, United Kingdom), Md Nazmul Haq (University of South Wales Wales, United Kingdom), Maruf Alam (Daffodil International University Dhaka, Bangladesh), and Bijoy Ghosh (Daffodil International University Dhaka, Bangladesh)</i>	

Rethinking Evaluation Metric for Probability Estimation Models using Esports Data	2683
<i>Euihyeon Choi (PS Analytics, South Korea), Jooyoung Kim (SK Holdings C&C, South Korea), and Wonkyung Lee (PS Analytics, South Korea)</i>	
Communication Efficient Federated Learning Based on Combination of Structural Sparsification and Hybrid Quantization Sensing	2690
<i>Tingting Wu (China Mobile Research Institute, China), Wei Yu (China Mobile Research Institute, China), Manxue Guo (China Mobile Research Institute, China), Wenjing Nie (China Mobile Research Institute, China), Zimeng Jia (China Mobile Research Institute, China), and Lun Xin (China Mobile Research Institute, China)</i>	
1-D CNN-Based Online Signature Verification with Federated Learning	2698
<i>Lingfeng Zhang (The University of Tokyo, Japan), Yuheng Guo (The University of Tokyo, Japan), Yepeng Ding (The University of Tokyo, Japan), and Hiroyuki Sato (The University of Tokyo, Japan)</i>	
COVID-19 Detection System: A Comparative Analysis of System Performance Based on Acoustic Features of Cough Audio Signals	2706
<i>Asmaa Shati (University of Western Australia, Australia; King Khalid University, Saudi Arabia), Ghulam Mubashar Hassan (University of Western Australia, Australia), and Amitava Datta (University of Western Australia, Australia)</i>	
R-SACE: RIS-Enabled Sensing-Aided Communication Enhancement in ISAC Systems	2714
<i>Xiaohui Li (Nanjing University of Posts and Telecommunications, China; Taiyuan University of Technology, China), Yunpei Chen (Nanjing University of Posts and Telecommunications, China), Hong Wang (Nanjing University of Posts and Telecommunications, China), and Shuran Sheng (Shanghai Dianji University, China)</i>	
Deep Learning for Graph Analysis: Application to Online Human Activity Recognition	2720
<i>Nassim Mokhtari (ENIB, France), Mohamed Outlouhou (ENIB, France), Alexis Nédélec (ENIB, France), and Pierre De Loor (ENIB, France)</i>	
Personal Data Privacy in Software Development Processes: A Practitioner's Point of View	2727
<i>Vinicius C. Andrade (Federal Technology University - Paraná, Brazil), Sheila Reinehr (Pontifical Catholic University of Paraná, Brazil), Cinthia O. A. Freitas (Pontifical Catholic University of Paraná, Brazil), and Andreia Malucelli (Pontifical Catholic University of Paraná, Brazil)</i>	
DEU-Net: Dual Encoder U-Net for 3D Medical Image Segmentation	2735
<i>Yuxiang Zhou (Tokushima University, Japan), Xin Kang (Tokushima University, Japan), Fuji Ren (University of Electronic Science and Technology of China, China), Satoshi Nakagawa (The University of Tokyo, Japan), and Xiao Shan (Tokushima University Hospital, Japan)</i>	
Unlocking the Potentials of Transcriptomics in Predicting Pan Cancer Immune Therapy Response: A Deep Learning Approach Using PHZNet	2742
<i>Huazheng Pan (East China Normal University), Kun Yu (East China Normal University), Junyi Le (East China Normal University), Wenxin Hu (East China Normal University), and Taojun Jin (Shuguang Hospital Affiliated to Shanghai University of Traditional Chinese Medicine)</i>	

The 6th International Conference on Data Science and Computational Intelligence (DSCI-2023)

An Instruction Inference Graph Optimal Transport Network Model For Biomedical Commonsense Question Answering	2749
<i>Luyue Kong (Shandong Medical College, China), Shu Zhang (Shandong Medical College, China), Jinbao Li (Qilu University of Technology (Shandong Academy of Sciences), China), and Song Liu (Qilu University of Technology (Shandong Academy of Sciences), China)</i>	
Ergonomic Design of Precise Percutaneous Robot for Substantial Organs Based on JACK Simulation	2755
<i>Bowen Sun (Beijing Institute of Technology, China), Xin Peng (Beijing Institute of Technology, China), Saisai Li (Beijing Institute of Technology, China), Jiaxin Sun (Beijing Institute of Technology, China), and Haochuan Tian (HuangShan University, China)</i>	
A Novel Semantic Dependency and Aspect Interaction Graph Convolutional Network for Aspect-Level Sentiment Analysis	2763
<i>Yihong Zhu (Xihua University, China), Xiaoliang Chen (Xihua University, China), Junsen Fu (Xihua University, China), and Yajun Du (Xihua University, China)</i>	
Performance Evaluation of Flight Energy Consumption of UAVs in IRS-Assisted UAV Systems ...	2770
<i>Xiuyi Luo (Wuhan University of Technology, China), Chongrui Lu (Wuhan University of Technology, China), Siyi Ouyang (Wuhan University of Technology, China), and Siyu Xia (Wuhan University of Technology, China)</i>	
Research on UAV Obstacle Avoidance Method Based on Virtual-Real Combination Technology ..	2776
<i>Wanying Song (Xi 'an Technological University, China), Ying Lu (Xi 'an Technological University, China), Jin Liu (Xi 'an Technological University, China), Zilu Qin (Xi 'an Technological University, China), Xiaodan Wang (Xi 'an Technological University, China), and Yanfang Fu (Xi 'an Technological University, China)</i>	
A Residual Attention-Based Privacy-Preserving Biometrics Model of Transcriptome Prediction from Genome	2781
<i>Cheng Tian (Qilu University of Technology, China; Shandong Fundamental Research Center for Computer Science, China), Song Liu (Qilu University of Technology, China; Shandong Fundamental Research Center for Computer Science, China), Jinbao Li (Qilu University of Technology, China; Shandong Fundamental Research Center for Computer Science, China), Guangchen Wang (Qilu University of Technology, China; Shandong Fundamental Research Center for Computer Science, China), and Luyue Kong (Department of Medicine Shandong Medical College, China)</i>	

The 13th International Conference on Smart Computing, Networking and Services (SmartCNS-2023)

Designing and Implementing Communication-Efficient Model of Distributed System for Real-Time Electromagnetic Transient Simulation	2789
<i>Qi Guo (State Key Laboratory of HVDC, Electric Power Research Institute, China Southern Power Grid; Guangdong Provincial Key Laboratory of Intelligent Operation and Control for New Energy Power System; CSG Key Laboratory for Power System Simulation, Electric Power Research Institute, China Southern Power Grid), Binjiang Hu (State Key Laboratory of HVDC, Electric Power Research Institute, China Southern Power Grid; Guangdong Provincial Key Laboratory of Intelligent Operation and Control for New Energy Power System; CSG Key Laboratory for Power System Simulation, Electric Power Research Institute, China Southern Power Grid), Zeqi Hong (State Key Laboratory of HVDC, Electric Power Research Institute, China Southern Power Grid; Guangdong Provincial Key Laboratory of Intelligent Operation and Control for New Energy Power System; CSG Key Laboratory for Power System Simulation, Electric Power Research Institute, China Southern Power Grid), Yanjun Zhao (China Southern Power Grid Co., Ltd), Shuyong Li (State Key Laboratory of HVDC, Electric Power Research Institute, China Southern Power Grid; Guangdong Provincial Key Laboratory of Intelligent Operation and Control for New Energy Power System; CSG Key Laboratory for Power System Simulation, Electric Power Research Institute, China Southern Power Grid), and Liang Tu (State Key Laboratory of HVDC, Electric Power Research Institute, China Southern Power Grid; Guangdong Provincial Key Laboratory of Intelligent Operation and Control for New Energy Power System; CSG Key Laboratory for Power System Simulation, Electric Power Research Institute, China Southern Power Grid)</i>	
DP-ProtoNet: An Interpretable Dual Path Prototype network for Medical Image Diagnosis	2797
<i>Luyue Kong (Shandong Medical College, China), Ling Gong (Shandong Medical College, China), Guangchen Wang (Qilu University of Technology, China), and Song Liu (Qilu University of Technology, China)</i>	

Author Index