ISSRE 2021 Online Program

(Preliminary)
Research Papers

Best Research Paper Nominees (Tue Oct 26, 13:45-14:30 UTC)

**Tensfa: Detecting and Repairing Tensor Shape Faults in Deep Learning Systems**
Dangwei Wu (Shanghai Jiao Tong University), Beijun Shen (Shanghai Jiao Tong University), Yuting Chen (Shanghai Jiao Tong University), He Jiang (Dalian University of Technology) and Lei Qiao (Beijing Institute of Control Engineering)

**Expanding Fix Patterns to Enable Automatic Program Repair**
Vesna Nowack (Queen Mary University of London), David Bowes (Lancaster University), Steve Counsell (Brunel University), Tracy Hall (Lancaster University), Saemundur Haraldsson (Stirling University), Emily Winter (Lancaster University) and John Woodward (Queen Mary University of London)

**Lessons Learned from the Development of a Mechanical Ventilator for COVID-19**
Silvia Bonfanti (University of Bergamo), Andrea Bombarda (University of Bergamo), Angelo Gargantini (University of Bergamo), Elvinia Riccobene (Computer Science Dept., University of Milan), Patrizio Pelliccione (GSSI - Gran Sasso Science Institute), Cristiano Galbiati (Princeton University) and Masayuki Wada (AstroCeNT, Nicolaus Copernicus Astronomical Center, Polish Academy of Sciences)

**How Long Will it Take to Mitigate this Incident?**
Weijing Wang (College of Intelligence and Computing, Tianjin University), Junjie Chen (College of Intelligence and Computing, Tianjin University), Lin Yang (College of Intelligence and Computing, Tianjin University), Hongyu Zhang (The University of Newcastle), Pu Zhao (Microsoft Research), Bo Qiao (Microsoft Research), Yu Kang (Microsoft Research), Qingwei Lin (Microsoft Research), Saravanan Kumar Rajmohan (Microsoft 365), Feng Gao (Microsoft Azure), Zhangwei Xu (Microsoft Azure), Yingnong Dang (Microsoft Azure) and Dongmei Zhang (Microsoft Research)

Research Session 1: Defect Prediction (Tue Oct 26, 15:30-16:00 UTC, Session Chair: Katerina Goseva-Popstojanova)

**BEIRUT: Repository Mining for Defect Prediction**
Amir Elmishali (Ben-Gurion University of the Negev), Bruno Sotto-Mayor (Ben-Gurion University of the Negev), Inbal Roshanski (Ben-Gurion University of the Negev), Amit Sultan (Ben-Gurion University of the Negev) and Meir Kalech (Ben-Gurion University of the Negev)
Multi-source Cross Project Defect Prediction with Joint Wasserstein Distance and Ensemble Learning
Quanyi Zou (South China University of Technology), Lu Lu (South China University of Technology), Zhanyu Yang (South China University of Technology) and Hao Xu (South China University of Technology)

GCN2defect: Graph Convolutional Networks for SMOTETomek-based Software Defect Prediction
Cheng Zeng (School of Computer Science and Information Engineering, Hubei University), Chun Ying Zhou (School of Computer Science and Information Engineering, Hubei University), Sheng Kai Lv (School of Computer Science and Information Engineering, Hubei University), Peng He (School of Computer Science and Information Engineering, Hubei University) and Jie Huang (School of Computer Science and Technology, Guizhou University)

Research Session 2: Anomaly Detection (Tue Oct 26, 16:15-16:45 UTC, Session Chair: Shenglin Zhang)

LogFlash: Real-time Streaming Anomaly Detection and Diagnosis from System Logs for Large-scale Software Systems
Tong Jia (Peking University) and Ying Li (Peking University)

Identifying Root-Cause Metrics for Incident Diagnosis in Online Service Systems
Canhua Wu (Tsinghua University), Nengwen Zhao (Tsinghua University), Lixin Wang (China Construction Bank), Xiaoqin Yang (China Construction Bank), Shining Li (China Construction Bank), Ming Zhang (China Construction Bank), Xing Jin (China Construction Bank), Xidao Wen (Tsinghua University), Xiaohui Nie (Tsinghua University), Wenchi Zhang (BizSeer), Kaixin Sui (BizSeer) and Dan Pei (Tsinghua University)

Robust KPI Anomaly Detection for Large-Scale Software Services with Partial Labels
Shenglin Zhang (Nankai University), Chenyu Zhao (Nankai University), Yicheng Sui (Nankai University), Ya Su (Tsinghua University), Yongqian Sun (Nankai University), Yuzhi Zhang (Nankai University), Dan Pei (Tsinghua University) and Yizhe Wang (Beijing Bohong Keyuan Information Technology Co. LTD)

Research Session 3: Deep Learning Applications (Tue Oct 26, 16:45-17:30 UTC, Session Chair: Artur Andrzejak)
Contextual-Semantic-Aware Linkable Knowledge Prediction in Stack Overflow via Self-Attention
Zhaolin Luo (Chongqing university), Ling Xu (Chongqing university), Zhou Xu (Chongqing university), Meng Yan (Chongqing university), Yan Lei (Chongqing university) and Can Li (Chongqing university)

Optimizing Selective Protection for CNN Resilience
Abdulrahman Mahmoud (University of Illinois at Urbana-Champaign and Harvard University), Siva Kumar Sastry Hari (NVIDIA), Christopher Fletcher (University of Illinois at Urbana-Champaign), Sarita Adve (University of Illinois at Urbana-Champaign), Charbel Sakr (University of Illinois at Urbana-Champaign), Naresh Shanbhag (University of Illinois at Urbana-Champaign), Pavlo Molchanov (NVIDIA), Michael Sullivan (NVIDIA), Timothy Tsai (NVIDIA) and Stephen Keckler (NVIDIA)

Dependency-aware Form Understanding
Shaokun Zhang (Peking University), Yuanchun Li (Microsoft Research), Weixiang Yan (Beijing University of Posts and Telecommunications), Yao Guo (Peking University) and Xiangqun Chen (Peking University)

Out-of-Distribution Detection through Relative Activation-Deactivation Abstractions
Zhen Zhang (State Key Laboratory of Computer Science, Institute of Software, Chinese Academy of Sciences, Beijing, China), Peng Wu (State Key Laboratory of Computer Science, Institute of Software, Chinese Academy of Sciences, Beijing, China), Yuhang Chen (Technology Center of Software Engineering, Institute of Software, Chinese Academy of Sciences, Beijing, China) and Jing Su (State Key Laboratory of Computer Science, Institute of Software, Chinese Academy of Sciences, Beijing, China)

Research Session 4: Program Repair (Wed Oct 27, 13:45-14:30 UTC, Session Chair: Michael Lyu)

REFIXAR: Multi-version Reasoning for Automated Repair of Regression Errors
Xuan-Bach D. Le (The University of Melbourne) and Quang-Loc Le (University College London).

Usability and Aesthetics: Better Together for Automated Repair of Web Pages
Thanh Le-Cong (Hanoi University of Science and Technology), Xuan Bach Le D. (Hanoi University of Science and Technology), Quyet Thang Huynh (Hanoi University of Science and Technology) and Phi Le Nguyen (Hanoi University of Science and Technology)

An Empirical Study on Common Bugs in Deep Learning Compilers
Xiaoting Du (Beihang University), Zheng Zheng (Beihang University), Lei Ma (University of Alberta) and Jianjun Zhao (Kushu University)
A Comparative Study of Automatic Program Repair Techniques for Security Vulnerabilities
Eduard Pinconschi (INESC-ID, IST-ULisboa), Rui Abreu (INESC-ID, University of Porto) and Pedro Adão (IST-ULisboa and Instituto de Telecomunicações)

Research Session 5: Software Testing I (Wed Oct 27, 14:45-15:15 UTC, Session Chair: Nuno Antunes)

More Reliable Test Suites for Dynamic APR by using Counterexamples
Amirfarhad Nilizadeh (University of Central Florida), Marlon Calvo (University of Central Florida), Gary T. Leavens (University of Central Florida) and Xuan-Bach D. Le (The University of Melbourne).

Evaluating Natural Language Inference Models: A Metamorphic Testing Approach
Mingyue Jiang (Zhejiang Sci-Tech University), Houzhen Bao (Zhejiang Sci-Tech University), Kaiyi Tu (Zhejiang Sci-Tech University), Xiao-Yi Zhang (National Institute of Informatics) and Zuohua Ding (Zhejiang Sci-Tech University)

Black-Box and White-Box Test Case Generation for RESTful APIs: Enemies or Allies?
Alberto Martin-Lopez (SCORE Lab, I3US Institute, Universidad de Sevilla), Andrea Arcuri (Kristiania University College), Sergio Segura (SCORE Lab, I3US Institute, Universidad de Sevilla) and Antonio Ruiz-Cortés (SCORE Lab, I3US Institute, Universidad de Sevilla)

Research Session 6: Fault Analysis and Localization (Wed Oct 27, 15:15-16:00 UTC, Session Chair: Domenico Cotroneo)

An Efficient Approximation for Quantitative Analysis of Dynamic Fault Trees
Luyao Ye (Wuhan University of Technology), Erqing Li (Wuhan University of Technology), Dongdong Zhao (Wuhan University of Technology), Shengwu Xiong (Wuhan University of Technology), Siwei Zhou (Wuhan University of Technology) and Jianwen Xiang (Wuhan University of Technology)

Ahead of Time Mutation Based Fault Localisation using Statistical Inference
Jinhan Kim (KAIST), Gabin An (KAIST), Robert Feldt (Chalmers University of Technology) and Shin Yoo (KAIST)

What to Blame? On the granularity of Fault Localization for Deep Neural Networks
Matias Duran (University of Buenos Aires), Xiao-Yi Zhang (National Institute of Informatics), Paolo Arcaíni (National Institute of Informatics) and Fuyuki Ishikawa (National Institute of Informatics)

**A Novel Automatic Query Expansion with Word Embedding for IR-based Bug Localization**
Misoo Kim (Sungkyunkwan University), Youngkyoung Kim (Sungkyunkwan University) and Eunseok Lee (Sungkyunkwan University)


**VALL-NUT: Principled Anti-Greybox-Fuzzing**
Yuekang Li (Nanyang Technological University), Guozhu Meng (SKLOIS, Institute of Information Engineering, Chinese Academy of Sciences), Jun Xu (Stevens Institute of Technology), Cen Zhang (Nanyang Technological University), Hongxu Chen (Nanyang Technological University), Xiaofei Xie (Nanyang Technological University), Haijun Wang (Ant Finance) and Yang Liu (Nanyang Technological University)

**Fuzz Testing the Compiled Code in R Packages**
Akhila Chowdary Kolla (Northern Arizona University), Toby Dylan Hocking (Northern Arizona University) and Alex Groce (Northern Arizona University)

**Black-Box Testing of Deep Neural Networks**
Taejoon Byun (University of Minnesota), Sanjai Rayadurgam (University of Minnesota) and Mats Heimdahl (University of Minnesota)

**Research Session 8: Security and Safety (Wed Oct 27, 16:45-17:30 UTC, Session Chair: Fabrizio Pastore)**

**EVIL: Exploiting Software via Natural Language**
Pietro Liguori (University of Naples Federico II), Erfan Al-Hossami (University of North Carolina at Charlotte), Vittorio Orbinato (University of Naples Federico II), Roberto Natella (University of Naples Federico II), Samira Shaikh (University of North Carolina at Charlotte), Domenico Cotroneo (University of Naples Federico II) and Bojan Cukic (University of North Carolina at Charlotte)

**Automatically Identifying Bug Reports with Tactical Vulnerabilities by Deep Feature Learning**
Wei Zheng (College of Software and Microelectronics, Northwest Polytechnic University), Manqing Zhang (Northwestern Polytechnical University), Hui Tang
Eager Falsification For Accelerating Robustness Verification of Deep Neural Networks
Min Zhang (East China Normal University), Wenjie Wan (East China Normal University), Zhaodi Zhang (East China Normal University), Fu Song (School of Information Science and Technology, ShanghaiTech University), Xuejun Wen (Huawei Technologies) and Xingwu Guo (East China Normal University)

PyMTDEvaluator: A Tool for Time-Based Moving Target Defense Evaluation
Matheus Torquato (Federal Institute of Alagoas and University of Coimbra, CISUC, DEI), Paulo Maciel (Universidade Federal de Pernambuco) and Marco Vieira (University of Coimbra, CISUC, DEI)

Research Session 9: Cloud Computing and Smart Contract (Thu Oct 28, 13:00-13:45 UTC, Session Chair: Raul Barbosa)

CloudPin: A Root Cause Localization Framework of Shared Bandwidth Package Traffic Anomalies in Public Cloud Networks
Shize Zhang (Tsinghua University), Yunfeng Zhao (Tsinghua University), Jianyuan Lu (Alibaba Group), Biao Lyu (Alibaba Group), Shunmin Zhu (Alibaba Group), Zhiliang Wang (Tsinghua University), Jiahai Yang (Tsinghua University), Lin He (Tsinghua University) and Jianping Wu (Tsinghua University)

Peculiar: Smart Contract Vulnerability Detection Based on Crucial Data Flow Graph and Pre-training Techniques
Hongjun Wu (National University of Defense Technology), Zhiuo Zhang (Guilin University of Electronic Technology), Shangwen Wang (National University of Defense Technology), Yan Lei (Chongqing University), Bo Lin (National University of Defense Technology), Yihao Qin (National University of Defense Technology), Haoyu Zhang (Academy of Military Sciences) and Xiaoguang Mao (National University of Defense Technology)

Enhancing the Analysis of Software Failures in Cloud Computing Systems with Deep Learning (J1C2)
Domenico Cotroneo (Università degli Studi di Napoli Federico II), Luigi De Simone, Pietro Liguori (Università degli Studi di Napoli Federico II), Roberto Natella (Università degli Studi di Napoli Federico II)

Research Session 10: Program Analysis (Thu Oct 28, 13:45-14:30 UTC, Session Chair: Jurriaan Hage)
Static Bound Analysis of Dynamically Allocated Resources for C Programs
Guangsheng Fan (National University of Defense Technology), Taoqing Chen (National University of Defense Technology), Banghu Yin (National University of Defense Technology), Liqian Chen (National University of Defense Technology), Tengbin Wang (National University of Defense Technology) and Ji Wang (National University of Defense Technology)

Simplify Array Processing Loops for Efficient Program Verification
Xiang Du (National University of Defense Technology), Liangze Yin (National University of Defense Technology) and Wei Dong (National University of Defense Technology)

The Behavioral Diversity of Java JSON Libraries
Nicolas Harrand (KTH), Thomas Durieux (KTH), David Broman (KTH) and Benoit Baudry (KTH)

Static Type Inference for Foreign Functions of Python
Mingzhe Hu (University of Science and Technology of China), Yu Zhang (University of Science and Technology of China), Wenzhao Huang (University of Science and Technology of China) and Yan Xiong (University of Science and Technology of China)

Research Session 11: Vulnerability and Security (Thu Oct 28, 14:45-15:20 UTC, Session Chair: Brahim HAMID)

Suraksha: A Framework to Analyze the Safety Implications of Perception Design Choices in AVs
Hengyu Zhao (University of California San Diego), Siva Kumar Sastry Hari (NVIDIA), Timothy Tsai (NVIDIA), Michael B. Sullivan (NVIDIA), Stephen W. Keckler (NVIDIA) and Jishen Zhao (University of California San Diego)

Secure and Efficient White-box Encryption Scheme for Data Protection against Shared Cache Attacks in Cloud Computing
Yang Shi (Tongji University), Mianhong Li (Tongji University), Wujing Wei (Tongji University), Yangyang Liu (The Hong Kong Polytechnic University) and Xiapu Luo (The Hong Kong Polytechnic University)

VulSPG: Vulnerability detection based on slice property graph representation learning
Weining Zheng (Harbin Institute of Technology), Yuan Jiang (Harbin Institute of Technology) and Xiaohong Su (Harbin Institute of Technology)

PyGuard: Finding and Understanding Vulnerabilities in Python Virtual Machines
Chengman Jiang (University of Science and Technology of China), Baojian Hua
(University of Science and Technology of China), Wanrong Ouyang (University of Science and Technology of China), Qiliang Fan (University of Science and Technology of China) and Zhizhong Pan (University of Science and Technology of China)

Research Session 12: Software Understanding (Thu Oct 28, 15:20-16:00 UTC, Session Chair: Keun Soo YIM)

Haytham Hijazi (CISUC, University of Coimbra), José Cruz (CISUC, University of Coimbra), Joao Castelhano (ICNAS, University of Coimbra), Ricardo Couceiro (CISUC, University of Coimbra), Miguel Castelo-Branco (ICNAS/CIBIT, University of Coimbra), Paulo de Carvalho (CISUC, University of Coimbra) and Henrique Madeira (CISUC, University of Coimbra)

Improving Code Summarization Through Automated Quality Assurance
Yuxing Hu (Chongqing University), Meng Yan (Chongqing University), Zhongxin Liu (Zhejiang University), Qiuyuan Chen (Zhejiang University) and Bei Wang (Chongqing University)

Characterizing Sensor Leaks in Android Apps
Xiaoyu Sun (Monash University), Xiao Chen (Monash University), Kui Liu (Nanjing University of Aeronautics and Astronautics), Sheng Wen (Swinburne University of Technology), Li Li (Monash University) and John Grundy (Monash University)

A Characteristic Study of Deadlocks in Database-Backed Web Applications
Zhengyi Qiu (North Carolina State University), Shudi Shao (North Carolina State University), Qi Zhao (North Carolina State University) and Guoliang Jin (North Carolina State University)

Research Session 13: Code Maintenance and Evolution (Thu Oct 28, 16:15-16:45 UTC, Session Chair: Shengjian Guo)

One Step Further: Investigating Problematic Files of Architecture Anti-patterns
Jingwen Liu (Xi'an Jiaotong University), Wuxia Jin (Xi'an Jiaotong University), Qiong Feng (Nanjing University of Science and Technology), Xinyu Zhang (Xi'an Jiaotong University) and Yitong Dai (Xi'an Jiaotong University)

Characterizing and Understanding Software Developer Networks in Security Development
Song Wang (York University) and Nachiappan Nagappan (Facebook).
Fast Change-based Alarm Reporting for Evolving Software Systems
Anushri Jana (TCS Research), Ankita Khadsare (TCS Research), Bharti Chimdyalwar (TCS Research), Shrawan Kumar (TCS Research), Vaidehi Ghime (TCS Research) and Venkatesh R (TCS Research)

Research Session 14: Quality Assessment and Assurance (Thu Oct 28, 16:45-17:30 UTC, Session Chair: Peter Popov)

Nondeterministic Impact of CPU Multithreading on Training Deep Learning Systems
Guanping Xiao (Nanjing University of Aeronautics and Astronautics), Jun Liu (Nanjing University of Aeronautics and Astronautics), Zheng Zheng (Beihang University) and Yulei Sui (University of Technology Sydney)

Hawkeye: User-Guided Enumeration of Scenarios
Allison Sullivan (The University of Texas at Arlington)

Peeking into the Gray Area of Mobile World: An Empirical Study of Unlabeled Android Apps
Sen Chen (Tianjin University), Lingling Fan (Nankai University), Cuiyun Gao (Harbin Institute of Technology (Shenzhen)), Fu Song (ShanghaiTech University) and Yang Liu (Nanyang Technological University)

Supporting Deep Neural Network Safety Analysis and Retraining Through Heatmap-Based Unsupervised Learning (J1C2)
Hazem Fahmy (University of Luxembourg), Fabrizio Pastore (University of Luxembourg), Mojtaba Bagherzadeh (University of Ottawa) and Lionel Briand (University of Luxembourg)
Industry Papers

Best Industry Paper Nominees (Tue Oct 26, 14:45-15:30 UTC)

Continuous Testing and SLA Management of 5G Networks for Industrial Automation
Catello Di Martino (NOKIA Bell Labs) and Anwar Walid (NOKIA Bell Labs)

MultiCode: A Unified Code Analysis Framework based on Multi-type and Multi-granularity Semantic Learning
Xu Duan (Institute of Software, Chinese Academy of Sciences), Jingzheng Wu (Institute of Software, Chinese Academy of Sciences), Mengnan Du (Nanjing University Of Chinese Medicine), Tianyue Luo (Institute of Software, Chinese Academy of Sciences), Mutian Yang (Beijing ZhongKeWeiLan Technology Co.,Ltd.) and Yanjun Wu (Institute of Software, Chinese Academy of Sciences)

Towards a Secure Software Lifecycle for Autonomous Vehicles
Lama Moukahal (Queen's University), Mohammad Zulkernine (Queen's University) and Martin Soukup (Irdeto)

The protection of LP-WAN Endpoints via TEE: a Chemical Storage Case Study
Luigi Coppolino (University of Naples "Parthenope"), Salvatore D'Antonio (University of Naples "Parthenope"), Giovanni Mazzeo (University of Naples "Parthenope"), Luigi Romano (University of Naples "Parthenope"), Irene Bonetti (Attilio Carmagnani "AC" S.p.A.) and Elena Spagnuolo (Attilio Carmagnani "AC" S.p.A.)

Online sessions:

Online Industry Session 1: Embedded System Reliability (Tue Oct 26, 15:30-16:00 UTC, Session Chair: M. Zubair Malik, North Dakota State University)

Evolution of the IEEE P7009 Standard: Towards Fail-Safe Design of Autonomous Systems
Marie Farrell (Maynooth University), Matt Luckcuck (Maynooth University), Laura Pullum (Oak Ridge National Laboratory), Michael Fisher (University of Manchester), Ali Hessami (Vega Systems), Danit Gal (University of Cambridge), Zvikomborero Murahwi (University Of Johannesburg) and Ken Wallace (Independent)

Genetic Algorithm-based Testing of Industrial Elevators under Passenger Uncertainty
Joritz Galarraga (Simula Research Laboratory), Aitor Arrieta (Mondragon Goi Eskola Politeknikoa), Shaukat Ali (Simula Research Laboratory), Goiuria Sagardui (Mondragon Goi Eskola Politeknikoa) and Maite Arratibel (Orona)

**System-specific risk rating of software vulnerabilities in industrial automation & control systems**
Monika Maidl (Siemens AG), Tiange Zhao (Siemens AG), Dirk Kröselberg (Siemens AG) and Tobias Limmer (Siemens AG)

**Online Industry Session 2: Infrastructure/Platform Reliability (Wed Oct 27, 13:45-14:25 UTC, Session Chair: Muntasir Rahman, Microsoft)**

**Changes in Intent: Behavioral Predictions of Distributed SDN Controller Reconfiguration**
Yuming Wu (Dept of ECE, Univ. of Illinois at Urbana-Champaign), Nishok Narasimha Mohanasamy (Nokia Bell Labs), Lalita Jagadeesan (Nokia Bell Labs) and Muntasir Rahman (Microsoft)

**Kubernetes for Cloud Container Orchestration Versus Containers as a Service (CaaS): Practical Insights. (Short Paper)**
Senecca Miller (Dottid), Travis Siems (Dottid) and Vidroha Debroy (Dottid)

**SHA-3-LPHP: Hardware Acceleration of SHA-3 for Low-Power High-Performance Systems**
Yuta Akiya (California Polytechnic University), Mohamed El-Hadedy (RECOIOT LLC), Kyle Thomas Le (California Polytechnic University), Megan Luong (California Polytechnic University), Valerio Formicola (IEEE Senior Member), Anas Salah Eddin (California Polytechnic University) and Justin Wilson (ACCR at USAFA)

**Innovation evaluation framework using state transition probability of the product.**
Kumi Jinzenji (NTT Corporation), Akio Jin (NTT Corporation) and Tatsuya Muramoto (NTT Corporation)


**Disclosing the Fragility Problem of Virtual Safety Testing for Autonomous Driving Systems**
Zhisheng Hu (Baidu Security), Shengjian Guo (Baidu Security), Zhenyu Zhong
How Far Have We Come in Fault Tolerance for Distributed Graph processing: A Quantitative Assessment of Fault Tolerance Effectiveness
Chengbo Zhang (Peking University), Ying Li (Peking University), Yong Yang (Peking University), Tong Jia (Peking University) and Zhirong Hou (ICBC Technology Co. Ltd)

ReSwitcher: Automatically Refactoring Java Programs for Switch Expression. (Short Paper)
Yang Zhang (Hebei university of science and technology), Chaoshuai Li (Hebei university of science and technology) and Shuai Shao (Hebei university of science and technology)

The Necessity of Low-code Engineering for Industrial Software Development: A Case Study and Reflections
Yi Wang (Beijing University of Posts and Telecommunications), Yang Feng (Nanjing University), Min Zhang (East China Normal University) and Pu Sun (Shandong Juncheng Metal Technology Co. Ltd)

Online Industry Session 4: SE Data Analysis (Wed Oct 27,15:30-16:10 UTC, Session Chair: Rahul Ghosh, American Express)

Automatic Issue Classifier: A Transfer Learning Framework for Classifying Issue Reports
Anas Nadeem (North Dakota State University), Muhammad Usman Sarwar (North Dakota State University) and Muhammad Zubair Malik (North Dakota State University)

Classification of Testable and Valuable User Stories by using Supervised Machine Learning Classifiers
Ishan Subedi (Dhuni Software LLC), Maninder Singh (Computer Science & IT, St. Cloud State University), Vijayalakshmi Ramasamy (Computer Science, University of Wisconsin-Parkside), Gursimran Singh Walia (Computer Science, Georgia Southern University)

Patternika: A Pattern-Mining-Based Tool For Automatic Library Migration
Andrei Tatarnikov (Russian Research Institute, Huawei Technologies Co., Ltd, Moscow, Russia), Polina Volkhontseva (Russian Research Institute, Huawei Technologies Co., Ltd, Moscow, Russia), Guangtai Liang (Software Analysis Lab, Huawei Technologies Co., Ltd, Beijing, China), Andrey Grishchenko (Russian Research Institute, Huawei Technologies Co., Ltd, Moscow, Russia), Oleg Serebrennikov (Russian Research Institute, Huawei Technologies Co., Ltd, Moscow, Russia) and Ivan Kniazkov (Russian Research Institute, Huawei Technologies Co., Ltd, Moscow, Russia)

Diktat: Lightweight Static Analysis for Kotlin
Andrey Kuleshov (Huawei Technologies Co., Ltd), Petr Trifanov (Huawei Technologies Co., Ltd), Vladislav Frolov (Huawei Technologies Co., Ltd) and Guangtai Liang (Huawei Technologies Co., Ltd)
Fast Panel and Abstracts

Online sessions:

Online Sessions 1: Program Code Analysis (Tue Oct 26, 16:15-16:45 UTC, Session Chair: Marcello Cinque, University of Naples Federico II)

Targeted Code Inspection based on Human Errors
Fuqun Huang (University of Coimbra) and Henrique Madeira (University of Coimbra)

A Static Analysis Framework for Detecting Bugs in Introductory Programs
Wenchu Xu (Nanjing University) and Yanran Ma (Foreign Language School)

Qinqin Wu (Guangdong Power Dispatching and Controlling Center), Hao Huang (Guangdong Power Dispatching and Controlling Center), Yi Tang (Guangdong Power Dispatching and Controlling Center), Zhenwei Gu (Guangdong Power Dispatching and Controlling Center) and Ang Jia (Xi'an Jiaotong University)

Dynamic Filtering and Prioritization of Static Code Analysis Alerts
Ulas Yuksel (Vestel Electronics) and Hasan Sozer (Ozyegin University)

Online Sessions 2: Systems Engineering (Tue Oct 26, 16:45-17:15 UTC, Session Chair: Long Wang, Tsinghua University)

Rustpi: A Rust-powered Reliable Micro-kernel Operating System
Yuanzhi Liang (Beihang University), Lei Wang (Beihang University), Siran Li (Beihang University) and Bo Jiang (Beihang University)

Hierarchical Scheduling for Real-Time Containers in Mixed-Criticality Systems
Marco Barletta (Federico II University of Naples), Marcello Cinque (Federico II University of Naples) and Raffaele Della Corte (Critiware S.r.l.)

ColocationSim: Simulate Colocation Datacenter with Microservices and Performance Interference
Kangjin Wang (Peking University) and Ying Li (Peking University)
A Runtime Monitoring Based Fuzzing Framework for Temporal Properties
Jinjian Luo (National University of Defense Technology), Meixi Liu (National University of Defense Technology), Yunlai Luo (National University of Defense Technology), Zhenbang Chen (National University of Defense Technology) and Yufeng Zhang (Hunan University)

RusBox: Towards Efficient and Adaptive Sandboxing for Rust
Wanrong Ouyang (University of Science and Technology of China) and Baojian Hua (University of Science and Technology of China)

Online Sessions 3: Software Engineering & Security (Wed Oct 27, 16:15-16:45 UTC, Session Chair: Damiano Torre, Texas A&M University at Central Texas)

Assurance Carrying Code for Software Supply Chain
Yutaka Matsuno (Nihon University), Yorioyki Yamagata (National Institute of Advanced Industrial Science and Technology (AIST)), Hideaki Nishihara (National Institute of Advanced Industrial Science and Technology (AIST)) and Yuichiro Hosokawa (Gunma Prefectural Women's University)

When is Continuous Integration Useful? Empirical Study on Team Size and Reporters in Development
Naoko Imai (Waseda University), Hironori Washizaki (Waseda University), Naohiko Tsuda (Waseda University) and Yoshiaki Fukuzawa (Waseda University)

Eye Tracking Sensors as a Contactless Interfaces in Wireless Security Protocols
Marek Ogiela (AGH University of Science and technology) and Lidia Ogiela (Pedagogical University of Krakow)

Software Security Readiness and Deployment
Saikath Bhattacharya (North Carolina State University), Munindar P. Singh (North Carolina State University) and Laurie Williams (North Carolina State University)

Online Sessions 4: Data-Driven Dependability (Wed Oct 27, 16:45-17:15 UTC, Session Chair: Catello Di Martino, Nokia Bell Labs)

Exception Handling Recommendation Based on Self-Attention Network
Kai Lin (Nanjing University of Aeronautics and Astronautics), Chuanqi Tao (Nanjing University of Aeronautics and Astronautics) and Zhiqiu Huang (Nanjing University of Aeronautics and Astronautics)
Information Hiding using Bucket Steganography
Katarzyna Koptyra (AGH University of Science and Technology) and Marek R. Ogiela (AGH University of Science and Technology)

Multi-Feature Fusion based Image Steganography using GAN
Zhen Wang (School of Computer Science and Technology, Shanghai University of Electric Power), Zhen Zhang (School of Computer Science and Technology, Shanghai University of Electric Power) and Jianhui Jiang (School of Software Engineering, Tongji University)

Online Log Parsing: Preliminary Literature Review
Scott Lupton (Waseda University), Hironori Washizaki (Waseda University), Nobukazu Yoshioka (Waseda University) and Yoshiaki Fukazawa (Waseda University)
Doctoral Symposium

Session 1 (Mon Oct 25, 13:00-14:25 UTC)

Introduction by Chairs

Katinka Wolter, Free University of Berlin
He Jiang, Dalian University of Technology

Keynote 1: Your PhD Supervisor is Your First Student

Wing Kwong Chan, City University of Hong Kong

Keynote 2: PhD-Program Preparation for Successful Post-PhD Career

Tao Xie, Peking University

Free interaction with the Keynote Speakers and Panel of Experts

Session 2 (Mon Oct 25, 14:30-15:30 UTC)

TSAI - Test Selection using Artificial Intelligence for the Support of Continuous Integration

Maria Laura Brzezinski Meyer (Renault Software Factory)

Mining Numerical Relations for Improving Software Reliability

Bo Zhang (The University of Newcastle)
A next-generation platform for Cyber Range-as-a-Service
Vittorio Orbinato (Università degli Studi di Napoli Federico II)

Failure Prediction for Cloud Applications through Ensemble Learning
Jomar Domingos (University of Coimbra)

Generation and Verification of Executable Assurance Case by Model-based Engineering
Fang Yan (university of york)

Session 3 (Mon Oct 25, 15:30-16:30 UTC)
Panel of Experts
Xin Peng, Fudan University
Jifeng Xuan, Wuhan University
Hui Liu, Beijing Institute of Technology
Tao Zhang, Macau University of Science and Technology
New Faculty Symposium

Opening (Mon Oct 25, 13:00 - 13:15 UTC)

General (Mon Oct 25, 13:15 - 14:15 UTC)

Apply funding to support your research
Zhi Jin (Peking University)

Planning a Research Program
Gail C Murphy (The University of British Columbia)

Ramping Up (Mon Oct 25, 14:30 - 15:30 UTC)

Building Up Our Research Team, Brick by Brick
David Lo (Singapore Management University)

From PhD Student to Full Professor: Lessons Learned in the Trenches
Michael Pradel (University of Stuttgart)

Long-Term (Mon Oct 25, 15:45 - 16:45 UTC)

Productivity
Ahmed E. Hassan (Huawei, Queen's university)

On Impact in Software Engineering Research
Andreas Zeller (Saarland University)

Closing (Mon Oct 25, 16:45 - 17:00 UTC)
Tutorials

**Tutorials for Crowdsourced Testing (Tue Oct 26, 15:30-17:30 UTC)**
Yuan Zhao (Nanjing University)

**Enhancing Robot Reliability through Runtime Verification (Tool Demonstration) (Wed Oct 27, 14:45-17:30 UTC)**
Angelo Ferrando (University of Genova) and Rafael C. Cardoso (The University of Manchester)

**Continuous Dependability Assessment and Improvement in DevOps (Thu Oct 28, 14:45-17:30 UTC)**
Alberto Avritzer (Esulabsolutions), Barbara Russo (Free University of Bozen-Bolzano), Catia Trubiani (Gran Sasso Science Institute, L’Aquila), Matteo Camilli (Free University of Bozen-Bolzano), André van Hoorn (University of Stuttgart) and Andrea Janes (Free University of Bozen-Bolzano)
GAUSS 2021 Workshop

Welcome Message (Mon Oct 25, 13:10-13:15 UTC)

Keynote (Mon Oct 25, 13:15-14:15 UTC)

Modeling Governance and Management in Socio-Technical SoSs
Jakob Axelsson (Mälardalen University)

Presentation (Mon Oct 25, 14:30-16:05 UTC)

Genetic Algorithm for Scheduling Communication Networks in Time-Triggered Systems-of-Systems (Mon Oct 25, 14:30-14:50 UTC)
Setareh Majidi (University of Siegen), Roman Obermaisser (University of Siegen)

Migration of Monoliths through the Synthesis of Microservices using Combinatorial Optimization (Mon Oct 25, 14:50-15:10 UTC)
Gianluca Filippone (University of L'Aquila), Marco Autili (University of L'Aquila), Fabrizio Rossi (University of L'Aquila), Massimo Tivoli (University of L'Aquila)

Automatic Extraction of Behavioral Features for Test Program Similarity Analysis (Mon Oct 25, 15:10-15:30 UTC)
Gianluca Filippone (University of L'Aquila), Marco Autili (University of L'Aquila), Fabrizio Rossi (University of L'Aquila), Massimo Tivoli (University of L'Aquila)

IDEA: Runtime Collection of Android Data (Mon Oct 25, 15:45-16:05 UTC)
Emanuele De Angelis (IASI – CNR), Alessandro Pellegrini (IASI – CNR), Maurizio Proietti (IASI – CNR)

Closing (Mon Oct 25, 16:05-16:10 UTC)
SHIFT 2021 and IWSF 2021 Workshops

Keynote (Mon Oct 25, 15:45-17:30 UTC)

Constrained IoT Devices: A global approach (hardware/software) to secure embedded applications
David Hely (The Grenoble Institute of Technology)

Strong type systems, weak defenses? – The problem with function parameters and implicit conversions
Zoltan Porkoláb (Eötvös Loránd University)

Presentation: (Mon Oct 25, 15:45-17:30 UTC)

KS-TCP: An Efficient Test Case Prioritization Approach based on K-medoids and Similarity
Jinfu Chen (Jiangsu University), Yuechao Gu (Jiangsu University), Saihua Cai (Jiangsu University), Haibo Chen (Jiangsu University) and Jingyi Chen (Jiangsu University)

Input/Output Check Bugs Taxonomy – Injection in Spotlight
Irena Bojanova (NIST), Carlos Eduardo Cardoso Galhardo (INMETRO) and Sara Moshtari (RIT)
WoSAR 2021 Workshop

Opening (Mon Oct 25, 12:50-13:00 UTC)

Rivalino Matias and Jianwen Xiang (General Co-Chairs)
Alberto Avritzer and Xiaoyuan Xie (Program Co-Chairs)

Session 1: Software Aging and Rejuvenation based on Machine Learning (Mon Oct 25, 13:00-14:00 UTC, Session chair:)

Keynote Talk + Q&A : Developing Optimal Software Rejuvenation Strategies based on Machine Learning Techniques (Mon Oct 25, 13:00-13:40)
Kalyan Vaidyanathan (BAE Systems Inc.)

Live Research Paper : Within-Project Software Aging Defect Prediction Based on Active Learning (Mon Oct 25, 13:40-14:00 UTC)
Mengting Liang (Wuhan University Of Technology), Dimeng Li (Wuhan University Of Technology), Bin Xu (Wuhan University Of Technology), Dongdong Zhao (Wuhan University Of Technology), Xiao Yu (Wuhan University Of Technology) and Jianwen Xiang (Wuhan University Of Technology)

Session 2: Software Rejuvenation Models (Mon Oct 25, 14:00-15:00 UTC, Session chair:)

Keynote Talk + Q&A : Software Rejuvenation for Secure and Safe Control of Cyber-Physical Systems (Mon Oct 25, 14:00-14:40 UTC)
Raffaele Romagnoli (Carnegie Mellon University)

Live Research Paper : Sensitivity analysis of software rejuvenation model with Markov regenerative process (Mon Oct 25, 14:40-15:00 UTC)
Junjun Zheng (Ritsumeikan University), Hiroyuki Okamura (Hiroshima University) and Tadashi Dohi (Hiroshima University)

Session 3: Software Aging Models (Mon Oct 25, 15:00-16:40 UTC,
Session chair: )

Aging and Rejuvenation Models of Load Changing Attacks in Micro-Grids (Mon Oct 25, 15:00-15:20 UTC)
Ricardo Melo Czekster (Newcastle University), Alberto Avritzer (eSulabSolutions) and Daniel Sadoc Menasché (Institute of Computing UFRJ)

Evaluation of software aging in component-based Web Applications subject to soft errors over time (Mon Oct 25, 15:20-15:40 UTC)
Jacopo Parri (University of Florence), Samuel Sampietro (University of Florence) Leonardo Scommega (University of Florence) and Enrico Vicario (University of Florence)

Memory Degradation Analysis in Private and Public Cloud Environments (Mon Oct 25, 15:40-16:00 UTC)
Ermeson Andrade (UFRPE), Fumio Machida (University of Tsukuba), Roberto Pietrantuono (University of Naples Federico II) and Domenico Cotroneo (University of Naples Federico II)

My Services Got Old! Can Kubernetes Handle the Aging of Microservices? (Mon Oct 25, 16:00-16:20 UTC)
José Flora (University of Coimbra), Miguel Teixera (University of Coimbra), Paulo Gonçalves (University of Coimbra) and Nuno Antunes (University of Coimbra)

Software Testing Strategies for Detecting Hypercall Handlers' Aging-related Bugs (Mon Oct 25, 16:20-16:40 UTC)
Lukas Bierlieb (University of Würzburg), Lukas Iffläender (University of Würzburg), Alexander Milenkoski (Cybereason), Alberto Avritzer (eSulab Solutions), Nuno Antunes (University of Coimbra) and Samuel Kounov (University of Würzburg)

Session 3: Closing Remarks (Mon Oct 25, 16:40-18:00 UTC, Session chair: )

(Mon Oct 25, 16:40-16:00 UTC): Wrap (feedback, discuss plans for next year) - All Invited

(Mon Oct 25, 16:00-19:00 UTC): WoSAR Live Social Banquet - All Invited
WoSoCer 2021 Workshop

Opening (Mon Oct 25, 13:00 - 13:10 UTC)

Session 1: Keynote (Mon Oct 25, 13:10 - 14:15 UTC)

Keynote Talk: Software certification: Lessons Learned from the Development of a Mechanical Ventilator for COVID-19

Patrizio Pelliccione (Computer Science at Gran Sasso Science Institute (GSSI))

Session 2: Machine Learning and Security Certification (Mon Oct 25, 14:30 - 15:30 UTC)

(WiP) LLTFI: Low-Level Tensor Fault Injector (Mon Oct 25, 14:30-14:50 UTC)
Abraham Chan (The University of British Columbia), Udit Kumar Agarwal (The University of British Columbia), Karthik Pattabiraman (The University of British Columbia)

An Efficient Dual Ensemble Software Defect Prediction Method with Neural Network (Mon Oct 25, 14:50-15:10 UTC)
Jinfu Chen (Jiangsu University), Jiaping Xu (Jiangsu University), Saihua Cai (Jiangsu University), Xiaoli Wang (Jiangsu University) and Yuechao Gu (Jiangsu University), Shuhui Wang (Jiangsu University)

From Application Security Verification Standard (ASVS) to Regulation Compliance: A Case Study in Financial Services Sector (Mon Oct 25, 15:10-15:30 UTC)
Vincent Tan (Singapore University of Technology and Design), Carmen Cheh (Singapore University of Technology and Design), Binbin Chen (Singapore University of Technology and Design)

Session 3: Design Models, Test Cases, Software Requirements (Mon...
Recommendations for the Usage of Design Models in Aviation Software (Mon Oct 25, 15:45-16:05 UTC)
André Sarkis (Aeronautics Institute of Technology), Johnny Marques (Aeronautics Institute of Technology), Luiz Alberto Vieira Dias (Aeronautics Institute of Technology)

Criteria for Software Requirements Specification based on Human Errors (Mon Oct 25, 16:05-16:25 UTC)
Fuqun Huang (Institute of Interdisciplinary Scientists)

Jinfu Chen (Jiangsu University), Jingyi Chen (Jiangsu University), Saihua Cai (Jiangsu University), Haibo Chen (Jiangsu University), Chi Zhang (Jiangsu University), Chuangfei Huang (Jiangsu University)

Session 4: Closing Remarks + Discussion (Mon Oct 25, 16:45 - 17:30 UTC)
RSDA 2021 Workshop

Session 1: OPENING AND KEYNOTE #1 (Mon Oct 25, 13:00 - 14:15 UTC)

Welcome and Opening
Raffaele Della Corte, Marta Catillo, João F. Ferreira and Guanpeng (Justin) Li

Keynote Talk: Failure Data Everywhere, but Not a Failure in Sight! The joys and frustrations of analyzing open data sources
Karthik Pattabiraman (University of British Columbia)

Session 2: MACHINE LEARNING AND DEPENDABILITY ANALYSIS (Mon Oct 25, 14:30 - 15:30 UTC)

Semi-automated model extraction from observations for dependability analysis
András Földvári (Budapest University of Technology and Economics), András Pataricza (Budapest University of Technology and Economics)

Invited Talk: Attacks on Ethereum: analyzing 10M blocks
Antonio Iannillo (University of Luxembourg)

Invited Talk: ML-based Network Security Applications for High-Speed Networks
Nuno Santos (INESC-ID)

Session 3: KEYNOTE #2 AND CLOSING (Mon Oct 25, 15:45 - 16:45 UTC)

Keynote Talk: The Need for Security Automation
Massimiliano Rak (University of Campania Luigi Vanvitelli)

Closing Remarks
Raffaele Della Corte, Marta Catillo, João F. Ferreira and Guanpeng (Justin)
RESS 2021 WORKSHOP

Keynote (Fri Oct 29, 13:00-15:00 UTC)

Robustness and Interpretability Driven Dependable Machine Learning
Michael R. Lyu (The Chinese University of Hong Kong)

Invited Talk (Fri Oct 29, 13:00-15:00 UTC)

Synthesizing Test Inputs
Yanyan Jiang (Nanjing University)

Dynamic Algorithms for Interactive Program Analysis
Qirun Zhang (Georgia Institute of Technology)

Testing of DNN Models - Challenges Ahead
Shin Yoo (Korea Advanced Institute of Science and Technology)

Presentation (Fri Oct 29, 13:00-15:00 UTC)

Safe and Secure: Mutually Supporting Safety and Security Analyses with Model-Based Suggestions
Bastian Kruck (itemis AG), Peter Munk (Robert Bosch GmbH), Daniel Angermeier (Fraunhofer Institute for Applied and Integrated Security)

A Combinatorial Reliability Analysis of Dynamic Fault Trees with Priority-AND Gates
Piaoyi Liu (Wuhan University of Technology), Siwei Zhou (Wuhan University of Technology), Luyao Ye (Wuhan University of Technology), Dongdong Zhao (Wuhan University of Technology), Jianwen Xiang (Wuhan University of Technology)

‘R: Towards Detecting and Understanding Code-Document Violations in Rust
Wanrong Ouyang (University of Science and Technology of China), Baojian Hua (University of Science and Technology of China)
RADAS 2021 WORKSHOP

Invited Talk (Fri Oct 29, 15:00-17:30 UTC)

Deeptest in Autonomous Driving
Baishakhi Ray (Associate Professor in Columbia University)

Security Investigation of ROS-based Systems and Applications
Tianwei Zhang (Nanyang Technological University)

Presentation (Fri Oct 29, 15:00-17:30 UTC)

Issue categorization and analysis of an open-source driving assistant system
Shuncheng Tang (University of Science and Technology of China), Zhenya Zhang (University of Science and Technology of China), Jia Tang (University of Science and Technology of China), Lei Ma (University of Alberta), Yinxing Xue (University of Science and Technology of China)

MC-FGSM: Black-box Adversarial Attack for Deep Learning System
Wenqiang Zheng (Tsinghua university), Yan-Fu Li (Tsinghua university)

Semantic learning and Understanding of multi-vehicle interaction patterns Using Primitive Driving Patterns With Bayesian Nonparametric Approaches
Lulu Jia (BUAA), Dezhen Yang (BUAA), Yi Ren (BUAA), Cheng Qian (BUAA), Zhifeng Li (BUAA)
Keynote (Fri Oct 29, 13:00-17:30 UTC)

Bugs with "intelligence" and intelligence with bugs
Zheng Zheng (Beihang University)

Safety: the first class concern on the dependability of autonomous systems
Zhi Jin (Peking University)

Advancing the State-of-the-Art of GUI Fuzzing for Mobile Apps
Ting Su (East China Normal University)

Data-Driven Software Dependability Modeling
Michael R. Lyu (The Chinese University of Hong Kong)

TD Dependability Modeling and Design: Challenges and Work Directions
Joseph Sifakis (Verimag Laboratory)

Presentation (Fri Oct 29, 13:00-17:30 UTC)

Computation Offloading and Task Scheduling with Fault-Tolerance for Minimizing Redundancy in Edge Computing
Xinying Liu (Tongji University), Jianhui Jiang (Tongji University) and Long Li (Huawei Technologies Co.)

Reliability Analysis of Systems Subject to Imperfect Fault Coverage Considering Failure Propagation and Component Relevancy
Chuanli Wu (Wuhan University of Technology), Zixiang Wang (Wuhan University of Technology), Siwei Zhou (Wuhan University of Technology), Dongdong Zhao (Wuhan University of Technology), Jing Tian (Wuhan University of Technology) and Jianwen Xiang (Wuhan University of Technology)

Methods for deep learning model failure detection and model adaption: A survey
Xiaoyu Wu (Huawei Technology Co.), Zheng Hu (Huawei Technology Co.), Ke Pei (Huawei Technology Co.), Liyan Song (Southern University of Science and Technology), Zhi Cao (Southern University of Science and Technology) and Shuyi Zhang (Southern University of Science and Technology)

Predicting gray fault based on context graph in container-based cloud
Siyu Yu (Guangxi University), Ningjiang Chen (Guangxi University) and Birui Liang
MindFI: A Fault Injection Tool for Reliability Assessment of MindSpore Applications
Yang Zheng (Huawei technologies co. ltd), Zhenye Feng (Huawei technologies co. ltd), Zheng Hu (Huawei technologies co. ltd) and Ke Pei (Huawei)
SSSML 2021 WORKSHOP

Keynote (Fri Oct 29, 13:00-17:30 UTC)

Presentation (Fri Oct 29, 13:00-17:30 UTC)

On the Necessity of Explicit Artifact Links in Safety Assurance Cases for Machine Learning
Lydia Gauerhof (Robert Bosch GmbH), Roman Gansch (Robert Bosch GmbH), Christian Heinzemmann (Robert Bosch GmbH), Matthias Woehrle (Robert Bosch GmbH) and Andreas Heyl (Robert Bosch GmbH)

Important-unit Coverage for Recurrent Neural Network
Xu Liu (Beijing Jiaotong University), Honghui Li (Beijing Jiaotong University), Rui Wang (Beijing Jiaotong University) and Zhouxian Jiang (Beijing Jiaotong University)

Multi-Scale Software Network Model for Software Safety of the Intended Functionality
Zhitao Wu (China Electronic Product Reliability and Environment Testing Research Institute), Xiaoming Yang (China Electronic Product Reliability and Environment Testing Research Institute), Ping Chen (China Electronic Product Reliability and Environment Testing Research Institute), Zongshun Qu (China Electronic Product Reliability and Environment Testing Research Institute) and Jun Lin (China Electronic Product Reliability and Environment Testing Research Institute)

Network Intrusion Detection by an Approximate Logic Neural Model
Jiajun Zhao (Shenzhen University), Qiuzhen Lin (Shenzhen University) and Junkai Ji (Shenzhen University)

Meaningful color image encryption algorithm based on compressive sensing and chaotic map
Min Liu (Guangdong Ocean University), Guodong Ye (Guangdong Ocean University) and Qiuzhen Lin (Shenzhen University)

Detection of IoT Devices That Mine Cryptocurrency
Wei Zheng (Shenzhen University), Liangbo Hou (Huazhong University of Science and Technology), Junming Yu (Shenzhen University) and Fei Chen (Shenzhen University)