

2021 The 3rd ACM International Symposium on Blockchain and Secure Critical Infrastructure (BSCI 2021) Technical Program

Hong Kong, China, June 7, 2021
(in conjunction with ACM AsiaCCS'21)
<http://www.cloud-conf.net/bsci/2021/>



09:00 – 09:15 Workshop Opening

09:15 – 10:15 Keynote Speech Session Chair: Kim-Kwang Raymond Choo

Dr. Samee U. Khan (Mississippi State University)

Talk Title: Blockchains, Security, and Infrastructures: What we Know and What we Can Know

10:15 – 11:15 BSCI Session 1

Session Chair: Jiamou Liu (The University of Auckland)

- **Decentralised Peer-to-Peer Crop Insurance**, Vinayak Iyer (Sardar Patel Institute of Technology, India); Kshitij Shah (Sardar Patel Institute of Technology, India); Saurabh Rane (Sardar Patel Institute of Technology, India); Radha Shankarmani (Sardar Patel Institute of Technology, India)
- **Revealing and Concealing Bitcoin Identities: A Survey of Techniques**, Saeed Rajput (Embry-Riddle Aeronautical University, USA); Karolina Bergman (Embry-Riddle Aeronautical University, USA)
- **MultiCall: A Transaction-batching Interpreter for Ethereum**, William Hughes (Chalmers University of Technology, Sweden); Gerardo Schneider (University of Gothenburg, Sweden); Alejandro Russo (Chalmers University of Technology, Sweden)

11:15 – 12:15 BSCI Session 2

Session Chair: Dragan Peraković (University of Zagreb)

- **Distributed Decentralized Chain (DDC) and k-Queue Variable Bulk Arrival and Static Bulk Service Model**, Abhilash Kancharla (Oklahoma State University, USA); Jongho Seol (Oklahoma State University, USA); Hye-Young Kim (Hongik University, South Korea); Nohpill Park (Oklahoma State University, USA)
- **Eth2Vec: Learning Contract-Wide Code Representations for Vulnerability Detection on Ethereum Smart Contracts**, Nami Ashizawa (Osaka University, Japan); Naoto Yanai (Osaka University, Japan); Jason Paul Cruz (Osaka University, Japan); Shingo Okamura (National Institute of Technology, Japan)

- **DecFL: An Ubiquitous Decentralized Model Training Protocol and Framework Empowered by Blockchain**, Felix Morsbach (Karlsruhe Institute of Technology, Germany); Salman Toor (Uppsala University, Sweden)

12:15 – 13:50 Lunch

14:00 – 15:00 BSCI Short Paper Session 1:

Session Chair: Jong-Hyuk Lee (Sejong University)

- **An Optimization Strategy for PBFT Consensus Mechanism Based On Consortium Blockchain**, Feilong Wang (Yanshan University, China); Yuhan Liu (Beihang University, China); Yangyang Li (National Engineering Laboratory for Public Safety Risk Perception and Control by Big Data, China); Xiong Li (Beijing Biwei Network Technology Co., Ltd., China); Xu Zhang (National Computer Network Emergency Response Technical Team of China, China); Xiaojun Shi (China Electronics Technology Group Corporation, China)
- **FutureText: A Blockchain-based Contract Signing Prototype with Security and Convenience**, Qing Zhang (Shanghai Financial Futures Information Technology Co., Ltd, China); Jian Gao (Shanghai Financial Futures Information Technology Co., Ltd, China); Qiqiang Qin (Shanghai Financial Futures Information Technology Co., Ltd, China); Chenyu Wang (Shanghai Financial Futures Information Technology Co., Ltd, China); Keting Yin (Zhejiang University, China)
- **A Novel Approach for Developing Decentralized Storage and Sharing Systems**, Canh-Tuan Tran (Hanoi University of Science and Technology, Vietnam) ; Van-Duy Pham (Hanoi University of Science and Technology, Vietnam); Thang Nguyen (Hanoi University of Science and Technology, Vietnam); Huu-Hai-Quan (Hanoi University of Science and Technology, Vietnam); Ba-Lam Do (Hanoi University of Science and Technology, Vietnam); Binhminh Nguyen (Hanoi University of Science and Technology, Vietnam); Thanh-Chung (Hanoi University of Science and Technology, Vietnam)

15:00 – 16:00 BSCI Short Paper Session 2:

Session Chair: Xuyun Zhang (Macquarie University)

- **An Anomaly Event Detection Method Based on GNN Algorithm for Multi-data Sources**, Yipeng Ji (Beihang University, China); Jingyi Wang (Beihang University, China)
- **Beyond Uber and Lyft: A Decentralized Cab Consortium over Blockchains**, Somanath Tripathy (Indian Institute of Technology Patna, India); Mayank Agarwal (Indian Institute of Technology Patna, India); Sandip Chakraborty (Indian Institute of Technology Kharagpur, India)
- **A Tool for Moving Blockchain Computations Off-Chain**, Gang Liu (Dalhousie University, Canada); Peter Bodorik (Dalhousie University, Canada); Dawn Jutla (Saint Mary's University, Canada)

16:00 -16:05 Closing Remark