iThings 2022- Accepted Regular Papers

#1570801037 CleverTrash: an IoT system for waste sorting with deep learning

Noria Foukia (University of Applied Sciences of Geneva, Switzerland); Swann Puig (University of Applied Sciences of Geneva (HEPIA), Switzerland)

1570811170 Privacy-aware Data Fusion and Prediction for Smart City Services in Edge Computing Environment

Lianyong Qi (Qufu Normal University, China); Xiaoxiao Chi (Macquarie University, Australia); Xiaokang Zhou (Shiga University, Japan); Qi Liu (Nanjing University of Information Science and Technology, China); Fei Dai (Southwest Forestry University, China); Xiaolong Xu (Nanjing University of Information Science & Technology, China); Xuyun Zhang (Macquarie University, Australia)

#1570809087 Distributed MQTT Brokers at Network Edges: A Study on Message Dissemination

Luoyao Hao, Xiao Yu, Tingrui Zhang and Henning Schulzrinne (Columbia University, USA)

#1570806319 Multi-stage Low Error Localization Based on Krill Herd Optimization Algorithm in WSNs

Chang Huang and Minghua Wang (University of South China, China)

#1570808000 A Decentralized Framework with Dynamic and Event-Driven Container Orchestration at the Edge

Umut Can Ozyar (Bogazici University, The Netherlands); Arda Yurdakul (Bogazici University, Turkey)

#1570806596 A Novel Harmony Search Cat Swarm Optimization Algorithm for Optimal Bridge Sensor Placement

Bin Luo and Lingzhi Yi (University of South China, China); Hengshan Wu (University of south China, China); Yun Qiu (Foshan Highway and Bridge Engineering Monitoring Station Co, China); Xiangguang Li (Railway Branch of Zhejiang Jiaogong Group Co., Ltd., China); Yuan Zhang (University of South China, China)

#1570806109 Reinforcement Learning Based Full Duplex Multi-user MIMO MAC Protocol (RL-MUFD)

Zhen Guan, Shengqian Yu, Ya Li and Min He (Yunnan University, China)

#1570801213 On-Ramp Merging for Connected Autonomous Vehicles using Deep Reinforcement Learning

Chinmay S Mahabal (University of Massachusetts Dartmouth, USA); Hua Fang (University of Massachusetts Medical School & Dartmouth, USA); Honggang Wang (University of Massachusetts, Dartmouth & College of Engineering, USA)

#1570807889 On-Device Training of Deep Learning Models on Edge Microcontrollers

Fabrizio De Vita and Giorgio Nocera (University of Messina, Italy); Dario Bruneo (Universita di Messina, Italy); Valeria Tomaselli and Mirko Falchetto (STMicroelectronics, Italy)

#1570806444 User Position-Based Wireless Sensor Network Deployment Algorithm

Fan Liang (Sam Houston State University, USA); Fang Yuan (University of Baltimore, USA); Xing Liu (Towson University, USA)

#1570801128 Edge-Cloud Cooperation for DNN Inference via Reinforcement Learning and Supervised Learning

Tinghao Zhang (Nanyang Technological University, Singapore); Zhijun Li (Harbin Institute of Technology, China); Yongrui Chen (University of Chinese Academy of Sciences, China); Kwok-Yan Lam and Jun Zhao (Nanyang Technological University, Singapore)

#1570808988 Visual Cybersecurity Collaboration and Incident Exchange in Multi-Stakeholder IoT Environments

Hanning Zhao and Bilhanan Silverajan (Tampere University, Finland)

#1570807611 Increasing throughput and lifetime using depth base routing in underwater wireless sensor networks

Muhammad Tahir, Arslan Aziz and Muhammad Junaid (The University of Haripur, Pakistan); Mohsin Raza Jafri (NUST University, Pakistan)

iThings 2022- Accepted Short Papers

#1570794290 Reinforcement learning-based IoT sensor scheduling strategy for bridge structure health monitoring

Yuan Zhang (University of South China, China); Hengshan Wu (University of south China, China); Lingzhi Yi and Bin Luo (University of South China, China); Yun Qiu (Foshan Highway and Bridge Engineering Monitoring Station Co, China)

#1570803269 Node Deployment and Confident Information Coverage for WSN-based Air Quality Monitoring

Yuan Tian, Yihui Sun and Yong Tang (University of South China, China)

#1570809401 For Real-Time Sensor Abnormality Detection In Oil Exploration: A Effective Time-Series Data Process System With Adaptive Adjustment

Xiaozheng Zhang and Jinghui Zhang (Southeast University, China)

#1570807396 IoT Droplocks: Wireless fingerprint theft using hacked smart locks

Steve Kerrison (James Cook University, Singapore)

#1570807565 Identifying Channel Related Vulnerabilities in Zephyr Firmware

Devansh Rajgarhia (Indian Institute of Technology Kharagpur, India); Peng Liu (Pennsylvania State

#1570807103 Things Data Interoperability Through Annotating oneM2M resources for NGSI-LD Entities

Sunil Kumar, SeungMyeong Jeong and Il-Yeop Ahn (Korea Electronics Technology Institute, Korea (South)); Muhammad Aslam Jarwar (University College London, United Kingdom (Great Britain))

Workshop Accepted Papers

FMobile 2022 - The First International Workshop on Future Mobile Computing and Networking for Internet of Things (FMobile 2022)

#1570800882 Demand-Oriented Allocation with Fairness in Multi-Operator Dynamic Spectrum Sharing Systems

Meng Ying Wang, Wei Wang, Wenjing Xu and JiaMeng Bi (Nanjing University of Aeronautics and Astronautics, China); Qiang Ye (Memorial University of Newfoundland, Canada)

#1570807804 Edge-assisted Puncturable Fine-grained Task Distribution for the IoT-oriented Crowdsensing

Liquan Jiang and Zhiguang Qin (University of Electronic Science and Technology of China, China)

#1570808129 Achieving Privacy-preserving data sharing for Dual Clouds

XingQi Luo (Beijing Institute of Technology, China); Haotian Wang (University of Pennsylvania, USA); Jinyang Dong (Chinese Academy of Military Science, China); Chuan Zhang (Beijing Institute of Technology, China); Tong Wu (Beijing Institute of Technology & Yangtze Delta Region Academy of Beijing Institute of Technology, China)

DeepSensing 2022 - The First International Workshop on Deep Learning-based Mobile Sensing (DeepSensing 2022)

#1570807507 Research on ultra-wideband (UWB) indoor accurate positioning technology under signal interference

Mingming Gong, Zhiyang Li and Wuyungerile Li (Inner Mongolia University, China)

#1570808575 Loop Closure Detection based on Deep Learning

Shulin Wang (University of Electronic Science and Technology of China, China)

Meta-IoT 2022 - The First International Workshop on Integrating Metaverse with Blockchain and 6G for Next-generation IoT (Meta-IoT 2022)

#1570807827 Efficient and Secure Collaborative Processing in Mobile Edge Computing via

Blockchain

Yuwei Le, Yiheng Jiang and Xintong Ling (Southeast University, China); Jiaheng Wang (National Mobile Communications Research Lab, Southeast University, China)

Energy-Secure AIoT 2022 - The First International Workshop on Energy-efficient and Secure Computing for Artificial Intelligence and Internet of Things (Energy-Secure AIoT 2022)

#1570806196 Sensing Intrusion Detection for Automatic Driving System based on Scene Semantic Centroid

Ziqi Zhao (University of South China, China); Lei Peng (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, China); Hongfeng Shu and Qi Liu (Shenzhen SmartCity Technology Development Group, China)