

Regular Papers

#1570800335: Securing uRLLC in UAV-assisted NOMA Wireless Network

Shanchao Zheng, Kan Yu, Guangshun Li and Xiaowu Liu (Qufu Normal University, China)

#1570801045: More Behind Your Electricity Bill: a Dual-DNN Approach to Non-Intrusive Load Monitoring

Yu Zhang (The Chinese University of Hong Kong, Hong Kong); Guoming Tang (Peng Cheng Laboratory, China); Qianyi Huang (Southern University of Science and Technology & Peng Cheng Laboratory, China); Yi Wang (Southern University of Science and Technology, China); Hong Xu (The Chinese University of Hong Kong, Hong Kong); Xudong Wang (The Chinese University of Hong Kong, Shenzhen, China)

#1570801065: Investigating Low-Battery Anxiety of Mobile Users

Yu Zhang (The Chinese University of Hong Kong, Hong Kong); Guoming Tang (Peng Cheng Laboratory, China); Qianyi Huang (Southern University of Science and Technology & Peng Cheng Laboratory, China); Kui Wu (University of Victoria, Canada); Yangjing Wu (The Chinese University of Hong Kong, Hong Kong); Yi Wang (Southern University of Science and Technology, China)

#1570807131: Cyber-Physical Contracts in Offline Regions

Lars Creutz (Institute for Software Systems (ISS), Trier University of Applied Sciences, Germany); Kevin Wagner (Trier University of Applied Sciences, Germany); Guido Dartmann (University of Applied Sciences Trier, Germany)

#1570807339: Mining Composite Spatio-Temporal Lifestyle Patterns from Geotagged Social Data

Suparna De, Usamah Jassat and Alex Grace (University of Surrey, United Kingdom (Great Britain)); Wei Wang (Xi'an Jiaotong Liverpool University, China); Klaus Mörner (Chemnitz University of Technology, Germany)

#1570807471: A Blockchain-based Scalable Electronic Contract Signing System

Kaicheng Yang (Guizhou University, China); Yongtang Wu (Weifang University of Science and Technology, China); Yuling Chen (Gui Zhou University, China)

#1570808407: A Multipath Source Location Privacy Protection Scheme in Wireless Sensor Networks via Proxy Node

Jing Sun (Guizhou University, China); Yuling Chen (Gui Zhou University, China); Xiao Lv (Guizhou Shuanhui Big Data Industry Development Co., Ltd, China); Xiaobin Qian (Guizhou CoVision Science & Technology Co., Ltd, China)

#1570810227: Contactless Elevator Button Action Recognition Based on Passive RFID

Chengtian Wang, Taochun Wang, Qing Qiu, Chuanxin Zhao and Fulong Chen (Anhui Normal University, China)

#1570811762: A Survey on Data Security in Network Storage Systems

Hongke Zhang (Xidian University, China); Zheng Yan (Xidian University & Aalto University, China); Xueqin Liang (Xidian University, China)

#1570812271: Abnormal Behavior Recognition Based on Hybrid Depth Model with ISE Block

Lu Liu (Hulunbuir University, China)

#1570814644: Delay-Outage Probability of Capacity Achieving-Based Task Offloading for Mobile Edge Computing

Behrouz Maham and Aigerim Ospanova (Nazarbayev University, Kazakhstan)

#1570814759: Data Availability Optimization for Cyber-Physical Systems

Liyong Li, Peijin Cong and Junlong Zhou (Nanjing University of Science and Technology, China); Zonghua Gu (Umeå University, Sweden); Keqin Li (State University of New York at New Paltz, USA)

#1570814868: Embedded Fault Diagnosis Expert System: Framework, Development Platform, Algorithms and Experiments

Dapeng Tan, Tong Wang and Chengyan Wang (Zhejiang University of Technology, China)

#1570815288: Construct Digital Twin Models in Cyber Space for Physical Objects of Intelligent Optical Network

Liwei Kuang (FiberHome Telecommunication Technologies Co., Ltd., China); Jun Wu (Fiberhome Telecommunication Technologies Co., Ltd, China); Shan Yin (FiberHome Telecommunication Technologies Co., LTD, China)

#1570815484: Effective task offloading heuristics for minimizing energy consumption in edge computing

Guichang Yin, Runze Chen and Yi Zhang (Nanjing University of Science and Technology, China)

#1570817415: Prediction of water quality factors for sea cucumber farming based on Dual-Assisted prediction model

XiaoMei Li, Huan Liu, Rongli Gai and Zumin Wang (Dalian University, China)

#1570817533: A Combined Network for Tomato Leaf Disease Recognition Based on the Improved EfficientNet

XiaoMei Li, Min Xu, Tianyu Li, Wei Xu, Rongli Gai, Lingyan Hu and Zumin Wang (Dalian University, China)

#1570818161: A Distributed Privacy-Preserving Framework for Deep Learning with Edge-Cloud Computing

Fei Dai (Southwest Forestry University, China); Guozhi Liu (Southwest Forestry University, Panlong District, Kunming City, Yunnan Province, China); Bi Huang (Southwest Forestry University, China); Xiaolong Xu (Nanjing University of Information Science and Technology, China); Chaochao Chen (Zhejiang University, China); Zhangbing Zhou (Institute Telecom, France); Xiaokang Zhou (Shiga University, Japan)

Short Papers

#1570794857: Preliminary Analysis of Shopping Behavior of Shopping Platform

Xuan Yang, Dejuan Li and Rodolfo C. Raga Jr. (Angeles University Foundation, Philippines)

#1570797448: An effective model-free Gaussian Process based online social media recommendation

Jiawei Xu (Nanjing University of Posts and Telecommunications, China); Yufeng Wang (Nanjing University of Posts and Telecommunicaitons, China); Jianhua Ma (Hosei University, Japan); Qun Jin (Waseda University, Japan)

#1570805631: Edge Computing with Relaying for Task Offloading under Nakagami-m Fading Channels

Aigerim Ospanova and Behrouz Maham (Nazarbayev University, Kazakhstan)

#1570806225: A Security Transaction Model Based on HTLC

Xiaochuan He and Chaoyue Tan (Guizhou University, China); Yongtang Wu (Weifang University of Science and Technology, China); Yuling Chen (Gui Zhou University, China)

#1570806456: TSHML: Token Shuffling under Haircut Policy Based on Machine Learning

Yilei Wang and Ming Liu (Qufu Normal University, China); Tao Li (Guizhou University, Guiyang, Guizhou, China); Chunmei Li (Qufu Normal University, China); Hui Wang (Ulsan University, Korea (South))

#1570806457: A K-anonymity Optimization Algorithm Under Attack Model

Manxiang Yang (GuiZhou University, China); Yongtang Wu (Weifang University of Science and Technology, China); Yuling Chen (Gui Zhou University, China)

#1570806733: The Optimal Attack-defense Scheme for Secret Sharing

Juan Ma (Guizhou University, China); Yuling Chen (Gui Zhou University, China); Xiao Lv (Guizhou Shuanhui Big Data Industry Development Co., Ltd, China); Xiaobin Qian (Guizhou CoVision Science & Technology Co., Ltd, China)

#1570806871: Data Confirmation Scheme based on Auditable CP-ABE

Lingyun Zhang and Yuling Chen (State Key Laboratory of Public Big Data, College of Computer Science and Technology, Guizhou University.); Xiaobin Qian (Guizhou CoVision Science & Technology Co., Ltd, China)

#1570806984: A Secure Comparison Protocol in the Malicious Model

Junhong Tao (Guizhou University, China); Yongtang Wu (Weifang University of Science and Technology, China); Yuling Chen (Gui Zhou University, China)

#1570807399: A secure multiparty computation round optimization scheme based on Standard Assumption

Yun Luo (University Of Guizhou, China); Yuling Chen (Gui Zhou University, China); Tao Li (Guizhou University, Guiyang, Guizhou, China); Yilei Wang (Qufu Normal University, China)

#1570807483: Overview of Interactive Visualization Methods

Rongli Gai, Zhibin Guo and Mengke Li (Dalian University, China)

#1570807503: Investigation on Application of Target Detection in Agriculture

Rongli Gai, Kai Wei, Huatian Zhang and Xiang Zhou Kong (Dalian University, China)

#1570807506: Fruit and Vegetable Picking Robot Movement Planning: A Review

Rongli Gai and Xiaohong Wang (Dalian University, China); Zhiyuan Chang (DaLian University, China); Yitong Guo (Dalian, Liaoning Province, China)

#1570809300: A Density-based Controller Placement Algorithm for Software Defined Networks

Jue Chen, Yujie Xiong and Dun He (Shanghai University of Engineering Science, China)

#1570809344: Fixed-time Control for Liquid-filled Flexible Spacecraft

Zhihao Zhu and Zhi Gao (Yancheng Institute of Technology, China); Yu Guo (Nanjing University of Science and Technology, China)

#1570810557: An Efficient Power Allocation using Learning-based Data Envelopment Analysis for Edge

Wei-Che Chien (Dong Hwa University, Taiwan)

#1570812268: A Review of Object Detection Based on Deep Learning

Fangye Zhao (Hulunbuir University, China)

#1570812276: Research on Lip Recognition Algorithm Based on Optimized Mobile Net

Jianlong Hao (Hulunbuir University, China)

#1570814133: Improved Secure and Efficient Privacy Preserving Provable Data Possession in Cloud Storage

Wang Xu An (Engineering University of CAPF, China); Ruifeng Li (Engineering University of PAP, China)

#1570815274: Safety Helmet Wearing Detection Based on A Lightweight YOLOv4 Algorithm

Junhua Chen, Sihao Deng, Xueda Huang, Xinrui Yang and Dong Yan (Chongqing University of Posts and Telecommunications, China)

#1570815351: A Multi-Factors Joint Normalization Data Processing Method for Face Recognition

Guozhong Wang (Chongqing College of Electronic Engineering, China); Yinxue Yi (Chongqing University of Posts and Telecommunications, China); Shijie Zhang (Chongqing College of Electronic Engineering, China)

#1570815682: Incremental prediction method of optical performance degradation trend based on deep learning

Shan Yin (FiberHome Telecommunication Technologies Co., LTD, China); Liwei Kuang and Fei Zou (FiberHome Telecommunication Technologies Co., Ltd., China)

#1570815905: Bayesian Network Based on Dynamic Risk Assessment for Petrochemical Sites- A Case Study of Oil Tanks

Yanzhi Li (Tianjin University & Tianjin Fire Science and Technology Research Institute of MEM, China); Yuqiao Li (Tianjin Fire Science and Technology Research Institute of MEM, China); Kaifeng Wang (Dalian University, China); Yan Zhang (Tianjin Fire Science and Technology Research Institute of MEM, China); Zumin Wang (Dalian University, China); Shuxue Zhao (Fire and Rescue Corps of Hainan Province, China)

#1570816535: Practical Implementation of an OPC UA Multi-Server Aggregation and Management Architecture for IIoT

Chenggen Pu (College of Automations & Chongqing University of Posts and Telecommunications, China); Xiwu Ding, Wang Ping and Yifu Yang (Chongqing University of Posts and Telecommunications, China)

#1570817053: Research on rolling bearing fault diagnosis method based on hybrid deep learning network model

Zhi hao Zhang and Zumin Wang (Dalian University, China)

#1570817444: A Combined Model for Cherry Greenhouse Temperature Prediction Based on LMD and Attention Mechanism

Zumin Wang, Tianyu Li, Min Xu, Wei Xu, Yan Liu, Lingyan Hu and Rongli Gai (Dalian University, China)

#1570817549: Image Augmentation based on Cross Domain Image Style Transfer

Wenshu Li (Zhejiang Sci-Tech University, China); Haijun Mao (China Jiliang University, China)