

2023 International Conference on Computing, Networking and Communications (ICNC 2023)

**Honolulu, Hawaii, USA
20-22 February 2023**



**IEEE Catalog Number: CFP2359R-POD
ISBN: 978-1-6654-5720-0**

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IEEE Catalog Number:	CFP2359R-POD
ISBN (Print-On-Demand):	978-1-6654-5720-0
ISBN (Online):	978-1-6654-5719-4

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Monday, February 20

Monday, February 20 8:20 - 8:30

Opening Remarks

Room: Pi'inaio Ballroom 1

Chairs: Cheng Li, Hussein T. Mouftah

Monday, February 20 8:30 - 9:30

Keynote I: Federated Learning in V2X Networks

Prof. Vincent Poor, Princeton University, USA

Room: Pi'inaio Ballroom 1

Chair: Cheng Li

Monday, February 20 9:30 - 10:00

Coffee Break

Monday, February 20 10:00 - 12:00

Invited Talks I

Machine Learning in NextG Networks via Generative Adversarial Networks.....N/A

Ender Ayanoglu

Federated Learning With Efficiency and Privacy Considerations in Wireless Networks.....N/A

Rose Qingyan Hu

Distributed Software Applications Based on Mobile Cloud and Software-Defined Networks.....N/A

Sergei Gorlatch

Room: Pi'inaio Ballroom 1

Chair: Rose Qingyang Hu

AI and Machine Learning for Communications and Networking

AMCN I

Room: Palolo 1

Chair: Wencong Su

Deep Reinforcement Learning Based Resource Allocation for 5G V2V Groupcast

Communications

Shang-Huan Wu, Ren-Hung Hwang, Chih-Yu Wang and Ching-Hsuan Chou
pp. 1-6

A Refined Energy Optimization Model for Edge Computing with Machine Learning

Xian Liu, Changcheng Huang and Wilsun Xu
pp. 7-11

Hierarchical Bayesian Attractor Model for Dynamic Task Allocation in Edge-Cloud Computing

Tatsuya Otoshi, Masayuki Murata, Hideyuki Shimonishi and Tetsuya Shimokawa
pp. 12-18

Impact of Grammar on Language Model Comprehension

Kimia Ameri, Michael Hempel, Hamid Sharif, Juan Lopez Jr. and Kalyan S. Perumalla
pp. 19-24

Deep Reinforcement Learning-Based Optimal Parameter Design of Power Converters

Van-Hai Bui, Fangyuan Chang, Wencong Su, Mengqi Wang, Yi Lu Murphey, Felipe Leno Da Silva, Can Huang, Xue Lincoln and Ruben Glatt
pp. 25-29

Neural Network based Unsupervised Face and Mask Detection in Surveillance Networks

Aninda Roy Ani, Sabir Saheel, Tarem Ahmed and Faisal Uddin
pp. 30-34

Communications and Information Security

CIS I

Room: Palolo 2

Chair: Olusola Tolulope Odeyomi

On False Data Injection Attack against Building Automation Systems

Michael Cash, Christopher Morales-Gonzalez, Shan Wang, Xipeng Jin, Alex Parlato, Jason Zhu, Qun Zhou Sun and Xinwen Fu
pp. 35-41

Optimal Codes for Distributed Storage

Jian Ren, Jian Li and Tongtong Li
pp. 42-46

Membership Management in Collaborative Intrusion Detection Systems

Chukwuebuka Ezelu and Ulrich Buehler
pp. 47-53

Wiggle: Physical Challenge-Response Verification of Vehicle Platooning

Connor Dickey, Christopher Smith, Quentin Johnson, Jingcheng Li, Ziqi Xu, Loukas Lazos and Ming Li
pp. 54-60

Network Anomaly Detection using a Graph Neural Network

Patrice Kisanga, Isaac Woungang, Issa Traore and Glaucio Carvalho
pp. 61-65

Byzantine-Resilient Federated Learning With Differential Privacy Using Online Mirror Descent

Olusola Tolulope Odeyomi and Gergely Zaruba
pp. 66-70

Edge Computing, Cloud Computing, and Big Data

ECB I

Room: Palolo 3

Chair: Yuanzhu Chen

Adaptive Resource Allocation in Quantum Key Distribution (QKD) for Federated Learning

Rakpong Kaewpuang, Minrui Xu, Dusit Niyato, Han Yu, Zehui Xiong and Sherman Shen
pp. 71-76

Study on High Availability and Fault Tolerance

Norman Kong Koon Kit and Michal Aibin
pp. 77-82

Real-Time Search and Rescue using Remotely Piloted Aircraft System with Frame Dropping

Rohan Sharma and Michal Aibin
pp. 83-88

Emergency Surgical Scheduling Model Based on Moth-flame Optimization Algorithm

Cuiting Huang, Sicong Ye, Shi Shuai, Mengdi Wei, Yehong Zhou, Ania Aibin and Michal Aibin

pp. 89-94

Trust and Rewards in a Two-Tier Consensus Architecture

Haytham Qushtom, Jelena Mišić, Vojislav B. Mišić and Xiaolin Chang

pp. 95-100

Analysis of Job Completion Time in Vehicular Cloud Under Concurrent Task Execution

Chinh Tran and Mustafa Mehmet-Ali

pp. 101-105

Next Generation Networks and Internet Applications

NGNI I

Room: Palolo 4

Chair: Tilman Wolf

LEO Satellite Communication in IoRT: a Virtual MISO Model

Xian Liu

pp. 106-110

Towards Programmable Networking With CoopNet: A Horizontal Parallel Multipath Approach

Razvan Cristian Voicu and Yusun Chang

pp. 111-116

Implementing Virtual Network Functions in Named Data Networking and Web 3.0

Puming Fang and Tilman Wolf

pp. 117-123

Performance Analysis of Fixed Broadband Wireless Access in mmWave Band in 5G

Soumya Banerjee, Sarada Prasad Gochhayat and Sachin Shetty

pp. 124-129

Network Services Management using Programmable Data Planes for Visual Cloud Computing

Alicia Esquivel Morel, Prasad Calyam, Chengyi Qu, Durbek Gafurov, Cong Wang, Komal Thareja, Anirban Mandal, Eric Lyons, Michael Zink, George Papadimitriou and Ewa Deelman

pp. 130-136

Augmenting Campus Wireless Architectures with SDN

William Brockelsby and Rudra Dutta

Monday, February 20 12:00 - 13:30

Lunch (self-pay)

Monday, February 20 13:30 - 15:30

Plenary Talks I

A concept of user-centric ultra-dense distributed MIMO towards realizing Beyond 5G systems

Prof. Fumiyuki Adachi, Tohoku University, Japan;

OT Cybersecurity Verification and Validation

Prof. Hamid Sharif, University of Nebraska-Lincoln, USA.

Room: Pi'inaio Ballroom 1

Chairs: Hossam S. Hassanein, Hossam S. Hassanein

Monday, February 20 15:30 - 16:00

Coffee Break

Monday, February 20 16:00 - 18:00

Invited Talks II

Wicked bizarre semiconductor physics of sensor security.....N/A

Kevin Fu

Unified View of IoT and CPS Security and Privacy.....N/A

Xinwen Fu

Deep autoencoders for analysis of single-cell RNA sequencing data.....N/A

Zhi Wei

Room: Pi'inaio Ballroom 1

Chair: Xinwen Fu

AI and Machine Learning for Communications and Networking

AMCN II

Room: Palolo 1

Chairs: Hovannes K. Kulhandjian, Hao Xu

AI-based RF-Fingerprinting Framework and Implementation using Software-Defined Radios

Hovannes K. Kulhandjian, Elizabeth Batz, Eduardo Garcia, Selena Vega, Sanjana Velma, Michel Kulhandjian, Claude D'Amours, Burak Kantarci and Tathagata Mukherjee
pp. 143-147

Reinforcement Learning based Optimal Dynamic Resource Allocation for RIS-aided MIMO Wireless Network with Hardware Limitations

Yuzhu Zhang, Lijun Qian, Abdullah Eroglu, Binbin Yang and Hao Xu
pp. 148-152

The Hysteresis Effect of Momentum Spillover in Asset Pricing via Spatial-Temporal Graph Learning

Chenhao He, Qing Li, Rui Cheng, Jun Wang and Jinghua Tan
pp. 153-158

Dynamic Spectrum Access in Non-stationary Environments: A DRL-LSTM Integrated Approach

Mingjie Feng, Wenhan Zhang and Marwan Krunz
pp. 159-164

Pedestrian Detection and Avoidance at Night Using Multiple Sensors and Machine Learning

Hovannes K. Kulhandjian, Jeremiah Barron, Megan Tamiyasu, Mateo Thompson and Michel Kulhandjian
pp. 165-169

Blockchain-based Data Quality Assessment to Improve Distributed Machine Learning

Yao Du, Zehua Wang, Cyril Leung and Victor C.M. Leung
pp. 170-175

Communications and Information Security

CIS II

Room: Palolo 2

Chair: Yantian Hou

A Hybrid Delay-aware Approach towards UAV Flight Data Anomaly Detection

Mengjie Jia, Ashok Vardhan Raja and Jiawei Yuan
pp. 176-180

Adversarial Technique Validation & Defense Selection Using Attack Graph & ATT&CK Matrix

Md Ariful Haque, Sachin Shetty, Charles A Kamhoua and Kimberly Gold
pp. 181-187

Virtual Curtain: A Communicative Fine-grained Privacy Control Framework for Augmented Reality

Aakash Shrestha, Yantian Hou, Min Long and Jiawei Yuan
pp. 188-194

Using Blockchain for Decentralized Artificial Intelligence with Data Privacy

Anand Surendra Masurkar, Xiaoyan Sun and Jun Dai
pp. 195-201

Evaluating Generative Adversarial Networks: A Topological Approach

Narges Alipourjehdi and Ali Miri
pp. 202-206

Consensus algorithms for Opt-in/Opt-out and proximity marketing context

Fatima Chahal, Hacene Fouchal and Dominique Gäiti
pp. 207-213

Edge Computing, Cloud Computing, and Big Data

ECB II

Room: Palolo 3

Chair: Vincent Latzko

Wrapper-Based Federated Feature Selection for IoT Environments

Afsaneh Mahanipour and Hana Khamfroush
pp. 214-219

Deep learning inference time guarantee in near future edge computing

Kouichi Genda
pp. 220-225

Effectiveness and predictability of in-network storage cache for Scientific Workflows

Caitlin Sim, Kesheng Wu, Alex Sim, Inder Monga, Chin Guok, Frank Wurthwein,
Diego Davila, Harvey Newman and Justas Balcas
pp. 226-230

Energy-Aware and Fair Multi-User Multi-Task Computation Offloading

Vincent Latzko, Osel Lhamo, Mahshid Mehrabi, Christian Leonard Vielhaus and Frank H.P. Fitzek
pp. 231-236

An edge computing-based monitoring framework for situation-aware embedded real-time systems

Nayreet Islam and Akramul Azim
pp. 237-241

Next Generation Networks and Internet Applications

NGNI II

Room: Palolo 4

Chair: Qiang Ye

Warehouse Deployment: A Comparative Measurement Study of Commercial Wi-Fi and CBRS Systems

Vanlin Sathya, Lyutianyang Zhang, Mohit Goyal and Mehmet Yavuz
pp. 242-248

SPA: A Scalable Pedestrian-awareness Application using NDN over CV2X

Proyash Podder, Azin Neishaboori, Somak Datta Gupta and Alexander Afanasyev
pp. 249-253

Hyperbolic Routing for Cache Privacy in Information Centric Networking

Sean Cannan, Andrew Jones and Robert Simon
pp. 254-260

A Simple UDP-Based Web Server on a Bare PC with 64-bit Multicore Processors: Design and Implementation

Navid Ordouie, Ramesh Karne, Alexander L Wijesinha and Nirmala Soundararajan
pp. 261-265

Enable Computation in the Network for Driver Assistance with Object Notification and Augmentation

Lijun Dong and Richard Li
pp. 266-272

Metaverse-based education service adoption and preference study using conjoint analysis

Junghwan Lee

Monday, February 20 19:00 - 21:00

Reception (Pi'inaio Ballroom 2)

Room: Pi'inaio Ballroom 2

Tuesday, February 21

Tuesday, February 21 8:30 - 9:30

Keynote II: Stochastic Cumulative DNN Inference for Intelligent IoT Applications

Prof. Weihua Zhuang, University of Waterloo, Canada

Room: Pi'inaio Ballroom 1

Chair: Cheng Li

Tuesday, February 21 9:30 - 10:00

Coffee Break

Tuesday, February 21 10:00 - 12:00

Invited Talks III

Time-space synchronized digital twin for B5G managed network.....N/A

Naoaki Yamanaka

Wave-Controlled Reconfigurable Intelligent Surfaces.....N/A

Lee Swindlehurst

Blockchain-enabled Edge Intelligence for 6G IoT.....N/A

Victor Leung

Application-Oriented Scheduling for Optimizing Information Freshness in Wireless Networks.....N/A

Yu Cheng

Room: Pi'inaio Ballroom 1

Chair: Yu Cheng

AI and Machine Learning for Communications and Networking

AMCN III

Room: Palolo 1

Chair: Chin-Tser Huang

Evaluation of Different Time Series Forecasting Models for 5G V2V Networks

Jian Liu and Chin-Tser Huang

pp. 278-282

Activity Detection for Grant-Free NOMA in Massive IoT Networks

Mehrtash Mehrabi, Mostafa Mohammadkarimi and Masoud Ardakani

pp. 283-287

Implementation of Real-Time Adversarial Attacks on DNN-based Modulation Classifier

Eyad Shtaiwi, Ahmed Refaey, Awais Khawar, Ahmed Alkhateeb, Ahmed Abdelhadi and Zhu Han

pp. 288-292

A Machine Learning Approach for the Detection of Injection Attacks on ADS-B Messaging Systems

Joshua Price, Hadjar Ould Slimane, Khair Al Shamaileh, Vijay Devabhaktuni and Naima A Kaabouch

pp. 293-297

Hensel's Compression-Based Dimensionality Reduction Approach for Privacy Protection in Federated Learning

Ahmed El ouadrhiri, Ahmed Abdelhadi and Phu H. Phung

pp. 298-303

Communications and Information Security

CIS III

Room: Palolo 2

Chair: Felix Ferreira

Secrecy Performance and Power Allocation for Cooperative Vehicular Relaying Networks in the Presence of Interference

Mohamed G. Abd El Ghafour, Ahmed Hassan Abd El-Malek and Mohamed Abozahhad

pp. 304-310

On an Integrated Security Framework for Defense Against Various DDoS Attacks in SDN

Hao Wu, Aiqin Hou, Weike Nie and Chase Q. Wu
pp. 311-317

Flick me once and I know it's you! Flicking-based Implicit Authentication for Smartwatch

Yanyan Li, Felix Ferreira and Mengjun Xie
pp. 318-323

SGChain: Blockchain Platform for Availability Attack Mitigation in Smart Grid Environments

Roshan L Neupane, Pravin Bhandari, Prasad Calyam and Reshmi Mitra
pp. 324-330

A Zero-Trust Framework for Industrial Internet of Things

Adel Atieh, Priyadarsi Nanda and Manoranjan Mohanty
pp. 331-335

TPMWallet: Towards Blockchain Hardware Wallet using Trusted Platform Module in IoT

Wei-Yang Chiu, Weizhi Meng and Wenjuan Li
pp. 336-342

Mobile and Wireless Networking

MWN

Room: Palolo 3

Chair: Jing Deng

Estimation of Cellular Wireless User Coordinates via Channel Charting and MUSIC

Amr Aly and Ender Ayanoglu
pp. 343-347

Time-Topology Routing in 3D Networks

Tomohiro Korikawa, Chikako Takasaki, Kyota Hattori and Hidenari Oowada
pp. 348-352

Traffic Behavior-based Device Type Classification

Chikako Takasaki, Tomohiro Korikawa, Kyota Hattori and Hidenari Oowada
pp. 353-357

Enabling PeerCloud in Vehicular Networks: Feasibility and Reliability of Vehicle-to-Vehicle Offloading

Xiaomei Zhang

pp. 358-364

Transmission-Cost Minimization for Packet-level Coding on Multi-path Wireless Networks

Wei Mao, Shu-ping Yeh, Jing Zhu, Hosein Nikopour and Shilpa Talwar

pp. 365-371

perMAC: Perturbation-based MAC for Dense Wireless Networks with Periodic Traffic

Jing Deng, Po-Ning Chen and Yunghsiang Sam Han

pp. 372-376

Wireless Communications

WC

Room: Palolo 4

Chair: Hamid Sadjadpour

Is Active IRS Useful for mmWave Wireless Networks or Not?

Jalal Jalali, Ata Khalili, Atefeh Rezaei and Jeroen Famaey

pp. 377-382

Can We Have a Better System than OFDM?

Tongtong Li, Jian Ren and Jinxian Deng

pp. 383-387

ECEA Based Joint Circular Design of Reconfigurable Intelligent Surfaces with Drone During Disaster

Sabila Newaz and Xingya Liu

pp. 388-392

Ergodic Capacity of the Cloud Radio Access Network: A General Solution

Xian Liu

pp. 393-397

A novel information-directed tree-search algorithm for RIS phase optimization in massive MIMO

Fnu I. Zakir Ahmed, Hamid Sadjadpour and Shahram Yousefi

pp. 398-402

Tuesday, February 21 12:00 - 13:30

Lunch (self-pay)

Tuesday, February 21 13:30 - 15:30

Plenary Talks II

Learning for Resilient Virtualized Edge Computing

Prof. Falko Dressler, TU Berlin, Germany;

From Edge Video Analytics to Federated Learning

Prof. Ling Liu, Georgia Institute of Technology, USA.

Room: Pi'inaio Ballroom 1

Chair: Vojislav B. Mišić

Tuesday, February 21 15:30 - 16:00

Coffee Break

Tuesday, February 21 16:00 - 18:00

Invited Talks IV

Stealthy Adversarial Machine Learning Attacks on RF Signal Classifiers: Algorithms and Countermeasures.....N/A

Marwan Krunz

Anticipatory Radio Resource Management for 5G Networks and Beyond.....N/A

Hassam Hassanein

Generative Steganography via Live Commenting on Streaming Videos.....N/A

Jie Wang

Deep Learning based Radar Sensing: From Traditional to Lightweight.....N/A

Shaoen Wu

Room: Pi'inaio Ballroom 1

Chair: Shaoen Wu

AI and Machine Learning for Communications and Networking

AMCN IV

Room: Palolo 1

Chair: Matteo Anedda

CMRCV: Causal Modeling To Localize Failed Equipment by Representative Nodes and Contribution Values

Yoichi Matsuo, Yuusuke Nakano and Keishiro Watanabe
pp. 403-408

Towards Instant Clustering Approach for Federated Learning Client Selection

Sarhad Arisdakessian, Omar Abdel Wahab, Azzam Mourad and Hadi Otrouk
pp. 409-413

Using Artificial Intelligence and IoT Solution for Forest Fire Prevention

Matteo Anedda, Giovanni Pettorru, Roberto Girau, Mauro Fadda, Daniel D Giusto and Mariella Sole
pp. 414-418

Optimization of multimodal Quantum Neural Networks (QNN) Classification algorithms on Quantum Integrated Cloud Systems

Samih Fadli, Bharat S Rawal and Andrew Mentges
pp. 419-425

Communications and Information Security

CIS IV

Room: Palolo 2

Chairs: Chin-Tser Huang, Junaid Ahmed Khan

Towards Secure Communications in Heterogeneous Internet of Things

James Nguyen, Weixian Liao and Wei Yu
pp. 426-430

A privacy awareness framework for NFT avatars in the metaverse

Dorottya Zelenyanszki, Zhe Hou, Kamanashis Biswas and Vallipuram Muthukkumarasamy
pp. 431-435

AI-based Cyber Event OSINT via Twitter Data

Dakota Dale, Kylie L McClanahan and Qinghua Li
pp. 436-442

Deep Learning Based Malapps Detection in Android Powered Mobile Cyber-Physical System

Moinul Islam Sayed, Sajal Saha and Anwar Haque
pp. 443-449

On Line Secure Elements: Deploying High Security Keystores and Personal HSMs

Pascal Urien
pp. 450-455

AFFIRM: Privacy-by-Design Blockchain for Mobility Data in Web3 using Information Centric Fog Networks with Collaborative Learning

Junaid Ahmed Khan and Kaan Ozbay
pp. 456-462

Multimedia Computing and Communications

MCC

Room: Palolo 3

Chair: Panos Nasiopoulos

COVID-19 Fake News Detector

Junjie Liu and Min Chen
pp. 463-467

Shallow- and Deep-fake Image Manipulation Localization Using Deep Learning

Junbin Zhang, Hamid Reza Tohidypour, Yixiao Wang and Panos Nasiopoulos
pp. 468-472

A Deep Learning Based Tone Mapping Operator for 4K HDR Images Focusing on Color Accuracy and Artistic Intent

Junbin Zhang, Yixiao Wang, Hamid Reza Tohidypour, Mahsa T Pourazad and Panos Nasiopoulos
pp. 473-477

Guiding Interactive Film With Emotion-Profiling Chatbots

Celina L. Ma, Haohong Wang and Mea Wang
pp. 478-483

From Screenplay to Screen: A Natural Language Processing Approach to Animated Film Making

Kyle Jorgensen, Haohong Wang and Mea Wang
pp. 484-490

Tuesday, February 21 19:00 - 21:00

Banquet (Pi'inaio Ballroom 2)

Room: Pi'inaio Ballroom 2

Wednesday, February 22

Wednesday, February 22 8:30 - 9:30

Keynote III: Going Off the Deep End with Deep Learning

Prof. Richard G. Baraniuk, Rice University, USA.

Room: Pi'inaio Ballroom 1

Chair: Jian Ren

Wednesday, February 22 9:30 - 10:00

Coffee Break

Wednesday, February 22 10:00 - 12:00

Distinguished Lecture I: Adaptive Ensemble Q-learning: Minimizing Estimation Bias via Error Feedback.

Prof. Junshan Zhang, University of California, Davis, USA.

Room: Pi'inaio Ballroom 1

Chair: Jian Ren

Invited Talks V

DCWiz: Transforming Data Center Operations and Management with AI.....N/A

Yonggang Wen

Towards Automating Network Operation Centers with AI.....N/A

Shervin Shirmohammadi

An in-depth look at Deep Learning in Digital Media.....N/A

Panos Nasiopoulos

Adapting Practical Byzantine Fault Tolerance (PBFT) for use with Blockchain-enable IoT systems.....N/A

Jelena Misic

Room: Palolo 1

Chair: Jelena Mišić

Communications and Information Security

CIS V

Room: Palolo 2

Chair: Ranwa Al Mallah

Using Diversity to Evolve More Secure and Efficient Virtual Local Area Networks

Ariel J. Aizpurua, Errin Fulp and Daniel Canas
pp. 491-495

On the Placement of Edge Servers in Mobile Edge Computing

Haotian Liu, Shiyun Wang, Hui Huang and Qiang Ye
pp. 496-500

Malicious Model Detection for Federated Learning Empowered Energy Storage Systems

Xu Wang, Yuanzhu Chen and Octavia A. Dobre
pp. 501-505

Cloud Security Requirement Based Threat Analysis

Ahmed Taha, Alexander Lawall and Neeraj Suri
pp. 506-510

Blockchain-enabled Efficient and Secure Federated Learning in IoT and Edge Computing Networks

Ranwa Al Mallah, David López and Talal Halabi
pp. 511-515

Social Computing and Semantic Data Mining

SCDM

Room: Palolo 3

Chair: Samih Fadli

Early Rumor Detection in Social Media Based on Graph Convolutional Networks

Niteesh Reddy Thota, Xiaoyan Sun and Jun Dai
pp. 516-522

Evaluating Weather Influence on User Participation in a Crowd-sensing Application

Iran Ribeiro, Vitor F Calmon, Thiago H. Silva, Celso Alberto Saibel Santos and Vinícius Fernandes Mota
pp. 523-528

Verification of a method for latent interest estimation based on user behavior analysis and POI attributes

Takanobu Omura, Felix B. Dollack, Panote Siriaraya, Da Li, Katsumi Tanaka, Yukiko Kawai and Shinsuke Nakajima
pp. 529-535

Preliminary Analysis of Dietary Management Support Method for Improving the Symptoms in Irritable Bowel Syndrome

Takuya Yamanaka, Da Li and Shinsuke Nakajima
pp. 536-540

Prioritizing transaction delivery in Ethereum network

Soosan Naderi Mighan, Jelena Mišić and Vojislav B. Mišić
pp. 541-546

Wireless Ad hoc and Sensor Networks

WASN I

Room: Palolo 4

Chair: Danijela Cabric

Distributed UAV Swarm Placement Optimization for Compressive Sensing based Target Localization

Yen-Chin Wang and Danijela Cabric
pp. 547-551

Wake-up Control for Energy-efficient Identifications of Multiple Emission Sources in Wireless Sensor Networks

Junya Shiraishi and Hiroyuki Yomo
pp. 552-557

A Novel Multivariate and Accurate Detection Scheme for Electricity Theft Attacks in Smart Grids

Alaa Awad Abdellatif, Aya Amer, Khaled Bashir Shaban and Ahmed Massoud
pp. 558-562

Two-Stage Online Reinforcement Learning based Distributed Optimal Resource Allocation for Multiple RIS-assisted Mobile Ad-Hoc Network

Yuzhu Zhang and Hao Xu
pp. 563-567

Mobile Sensing Cluster with Orbiting Mutant for Indistinguishable Events in Noisy Environments

Naoki Fujiyama, Shoma Izuhara, Shoma Nishigami, Eiji Nii, Hiroyuki Yomo and Yasuhisa Takizawa
pp. 568-574

Wednesday, February 22 12:00 - 13:30

Lunch (self-pay)

Wednesday, February 22 13:30 - 15:30

Distinguished Lecture II: RFID-based 3D Human Pose Tracking: Design, Generalization, and Data Augmentation

Prof. Shiwen Mao, Auburn University, USA.

Room: Pi'inaio Ballroom 1

Chair: Cheng Li

Invited Talks VI

Room: Palolo 1

5G NR-Light at Millimeter Waves: Design Guidelines for Mid-Market IoT Use Cases.....N/A

Michele Zorzi

"Zero-Power" RFID-enabled Wireless/B5G Ultrabroadband Modules for IoT, SmartAg, Industry 4.0 and Smart Cities Applications: from dream to reality with Additive Manufacturing.....N/A

Manos M. Tentzeris

TBD.....N/A

Li-Chun Wang

What Color is Your Internet? And Can We Make it Green?.....N/A

Cedric Westphal

Room: Palolo 1

Chair: Cedric Westphal

Next Generation Networks and Internet Applications and Mobile and Wireless Networking

NGNI / MWN

Room: Palolo 2

Chair: Cedric Westphal

A Deep Q-Learning Connectivity-Aware Pheromone Mobility Model for Autonomous UAV Networks

Shreyas Devaraju, Alexander Ihler and Sunil Kumar

pp. 575-580

Optimization Framework for Green Networking (Invited Paper)

Cedric Westphal and Alexander Clemm

pp. 581-585

SEANAC: Schema Enforced Automation of Name-based Access Control

Proyash Podder and Alexander Afanasyev

pp. 586-590

A-C: An NDN-based Blockchain Network With Erasure Coding

Ruiran Wang, Laurent Njilla and Shucheng Yu

pp. 591-595

Network Algorithms and Performance Evaluation

NAPE I

Room: Palolo 3

Chairs: Yoichiro Arii, Yuanzhu Chen

Evolutionary Algorithm with Phenotype Diversity for Virtual Network Embedding

Tatsuya Ootoshi and Masayuki Murata

pp. 596-602

Client-Transparent and Self-Managed MQTT Broker Federation at the Application Layer

Jose Fernando de Lacerda Machado, Jr., Marco Aurelio Spohn and Lisandro Z Granville

pp. 603-607

Joint Task and Flow Scheduling for Time-Triggered and Strict-Priority Networks

Anna Arestova, Lisa Maile, Nurbek Halikulov, Kai-Steffen J. Hielscher and Reinhard German

pp. 608-614

VM consolidation considering cores, memory, load for energy-constrained data centers

Muhammad Ali, Iryna Andriyanova and Jerome David

pp. 615-620

A Two-stage Trunk Reservation Control Method corresponding to General Call Priority using Switch Outside Disaster Area

Yoichiro Arii, Katsunori Yamaoka and Ken-ichi Baba

pp. 621-625

IP Transformation Initiatives to Generate Scalable Functional Verification Collaterals for Smart Reusability and Reduced Effort for Sign-off

Surajit Bhattacharjee and Dipankar Pal

pp. 626-629

Wireless Ad hoc and Sensor Networks

WASN II

Room: Palolo 4

Chair: Stefano Basagni

ABP vs. OTAA activation of LoRa devices: an Experimental Study in a Rural Context

Marcos Antonio de Oliveira, Jr, José F. M. Pauletti, Gerson Geraldo H. Cavalheiro and Anderson Monteiro da Rocha

pp. 630-634

DAWN-Sim: A Distributed Algorithm Simulator for Wireless Ad-hoc Networks in Python

Mustafa Tosun, Umut Can Cabuk, Orhan Dagdeviren and Yusuf Ozturk

pp. 635-639

A Reservation-based Adaptive MAC Protocol for OFDM Physical Layers in Underwater Networks

Sara Falleni, Tommaso Melodia and Stefano Basagni

pp. 640-645

Simulation-based Performance Analysis of an NR-U and WiFi Coexistence System in the Presence of Hidden Nodes

Qilei Ren and Jun Zheng

pp. 646-651

5G NR-Light at Millimeter Waves: Design Guidelines for Mid-Market IoT Use Cases

Matteo Pagin, Tommaso Zugno, Marco Giordani, Louis-Adrien Dufrene, Quentin Lampin and Michele Zorzi

pp. 652-658

Wednesday, February 22 15:30 - 16:00

Coffee Break

Wednesday, February 22 16:00 - 18:00

Distinguished Lecture III: Machine Learning and Security for Vehicular Communication Networks

Prof. Yi Qian, University of Nebraska-Lincoln, USA.

Room: Pi'inaio Ballroom 1

Chair: Shiwen Mao

Invited Talks VII

Smart Markers in a Blockchain: How to Release the Shackle of Single Branch.....N/A

Chin-Tser Huang

Interconnectedness -- from classic theory of graphs to emerging science of networks.....N/A

Yuanzhu Chen

AI for Cybersecurity and Security of AI.....N/A

Houbing Song

Room: Palolo 1

Chair: Houbing H Song

Network Advances

Room: Palolo 2

Chair: Edoardo S. Biagioni

Decomposition Models for the Routing and Slot Provisioning Problem

Brigitte Jaumard, Adham Mohammed and Quang Anh Nguyen

pp. 659-665

Secure Anonymous Acknowledgments in a Delay-Tolerant Network

Edoardo S. Biagioni

pp. 666-671

Flying Ad Hoc Coverage Area Mobility Model for Post-Disaster Area based on Two Drones

Intan Nabina Azmi, Yusnani Mohd Yussoff, Norashikin M. Thamrin, Fadhlan

Hafizhelmi Kamaru Zaman and Nooritawati Md Tahir

pp. 672-676

Channel Allocation Algorithm Of Wi-Fi

Jin Wang, Xiaofeng Zhong and Shidong Zhou

pp. 677-682

Localization System Architecture for Enhanced Positioning in Industry 4.0 Applications

Ramya Vasist, Vladica Sark, Meysam Goodarzi, Jesús Gutiérrez and Eckhard Grass

pp. 683-688

Network Algorithms and Performance Evaluation

NAPE II

Room: Palolo 3

Chair: Ramy Gohary

DIRS: Dynamic Initial Rate Setting in Congestion Control for Disaggregated Storage Systems

Xiaoqian Zhang, Bo Sheng, Allen Yang, Danlin Jia, Li Wang, Mahsa Bayati, Xuebin Yao, Pradeep Subedi and Ningfang Mi

pp. 689-693

A load balancing method using load factor on unsplittable flow edges in information and communication networks

Daichi Shimizu and Norihiko Shinomiya

pp. 694-697

Static Virtual Network Mapping With Advance Reservation In Elastic Optical Networks

Juzi Zhao, Varsha Kohirkar, Poonam Prakash Nigade, Ramanuja Kalkunte, Lenin Posham and Suresh Subramaniam

pp. 698-703

Iterative Symbol Decision Schemes for CP-OTFS on Static Multipath Channels

Shuen-Yu Tsai, Wei-Chang Chen and Char-Dir Chung

pp. 704-709

Uplink-to-Downlink Covariance Matrix Estimation in ULA-equipped FDD Massive MIMO Systems

Salime Bameri, Khalid Almahrog, Ramy Gohary, Amr El-Keyi and Yahia Ahmed

pp. 710-715