Research outputs

Approximate computing in 5G and 6G wireless systems: A survey and future outlook

Detecting Smart Contract Vulnerabilities with Combined Binary and Multiclass Classification

Will Edge Computing Enable Location-based Extended/Mixed Reality Mobile Gaming? Demystifying Trade-off of Execution Time vs. Energy Consumption

Towards Benchmarking GNSS Algorithms on FPGA using SyDR

Direction of Arrival Method for L-Shaped Array with RF Switch: An Embedded Implementation Perspective

Approximation Opportunities in Edge Computing Hardware: A Systematic Literature Review

Fast Real-World Implementation of a Direction of Arrival Method for Constrained Embedded IoT Devices

Acceptable Margin of Error: Quantifying Location Privacy in BLE Localization

A Survey on Low-Power GNSS

WIPHAL 2023: Work-in-Progress in Hardware and Software for Location Computation
LoRaWAN: Lost for Localization?

Towards the Advanced Data Processing for Medical Applications Using Task Offloading Strategy

The future of computing paradigms for medical and emergency applications

Implementation of Embedded Multiple Signal Classification Algorithm for Mesh IoT Networks

Measurements of User and Sensor Data from the Internet of Things (IoT) Devices

Managing Perceived Loneliness and Social-Isolation Levels for Older Adults: A Survey with Focus on Wearables-Based Solutions

A Survey of Security in Cloud, Edge, and Fog Computing

2022 International Conference on Localization and GNSS - Conference Proceedings

An Open-Source Software-Defined Receiver for GNSS Algorithms Benchmarking

Distributed ledger technology: State-of-the-art and current challenges

Evaluation of Real-Life LoRaWAN Localization: Accuracy Dependencies Analysis Based on Outdoor Measurement Datasets

Hands-On Experience with UWB: Angle of Arrival Accuracy Evaluation in Channel 9

On Applicability of Imagery-based CNN to Computational Offloading Location Selection
2021 International Conference on Localization and GNSS - Conference Proceedings

A Comprehensive and Reproducible Comparison of Cryptographic Primitives Execution on Android Devices

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Demystifying Blockchain Technology for Resource-Constrained IoT Devices: Parameters, Challenges and Future Perspective

Effectiveness modelling of digital contact-tracing solutions for tackling the COVID-19 pandemic

On Machine Learning Applicability to Transaction Time Prediction for Time-Critical C-ITS Applications

Wearables for Industrial Work Safety: A Survey

WIP Proceedings of the International Conference on Localization and GNSS (ICL-GNSS 2021)

On Secret Sharing with Newton's Polynomial for Multi-Factor Authentication

Applying Machine Learning to LTE Traffic Prediction: Comparison of Bagging, Random Forest, and SVM

Pitfalls of LPWA Power Consumption: Hands-On Design of Current Probe

Technical Perspectives of Contact-Tracing Applications on Wearables for COVID-19 Control

Towards Energy Efficiency in the Internet of Wearable Things: A Systematic Review
Measurements of Mobile Blockchain Execution Impact on Smartphone Battery

Analytical TCP Model for Millimeter-Wave 5G NR Systems in Dynamic Human Body Blockage Environment

Improving the Precision of Wireless Localization Algorithms: ML Techniques for Indoor Positioning

Modeling of Distributed Ledgers: Challenges and Future Perspectives

Privacy versus Location Accuracy in Opportunistic Wearable Networks

An Overview on Blockchain for Smartphones: State-of-the-Art, Consensus, Implementation, Challenges and Future Trends

Performance Analysis of Onshore NB-IoT for Container Tracking During Near-the-Shore Vessel Navigation

Applying Blockchain Technology for User Incentivization in mmWave-based Mesh Networks

Comparative study on GNSS positioning systems for autonomous vessels in the arctic region

The Internet of Bodies Needs a Human Data Model
Environmental monitoring with distributed mesh networks: An overview and practical implementation perspective for urban scenario

Action-Oriented Programming Model: Collective Executions and Interactions in the Fog

Analytical characterization of the blockage process in 3GPP New Radio systems with trilateral mobility and multi-connectivity

Implementation of 3GPP LTE Cat-M1 Technology in NS-3: System Simulation and Performance

Challenges of Privacy-aware Localization on Wearable Devices

A perspective on wireless M-bus for smart electricity grids

Blockchain Technology for Smartphones and Constrained IoT Devices: A Future Perspective and Implementation

On the performance of narrow-band internet of things (NB-IoT) for delay-tolerant services

Secure environmental monitoring for industrial internet of things: From framework to live implementation

Positioning information privacy in intelligent transportation systems: An overview and future perspective

Challenges of Multi-Factor Authentication for Securing Advanced IoT Applications

Evaluating SIR in 3D mmWave Deployments: Direct Modeling and Feasible Approximations
Autonomous UAV Landing on a Moving Vessel: Localization Challenges and Implementation Framework

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Facilitating mmWave Mesh Reliability in PPDR Scenarios Utilizing Artificial Intelligence

Packet level performance assessment of mmWave backhauling technology for 3GPP NR Systems

Ray-Based Modeling of Unlicensed-Band mmWave Propagation Inside a City Bus

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Concept design and performance evaluation of UAV-based backhaul link with antenna steering

Dynamic Resource Sharing in 5G with LSA: Criteria-Based Management Framework

Mobility-Centric Analysis of Communication Offloading for Heterogeneous Internet of Things Devices

On the Fraction of LoS Blockage Time in mmWave Systems with Mobile Users and Blockers

Performance Limitations of Parsing Libraries: State-of-the-Art and Future Perspectives

System-level analysis of IEEE 802.11ah technology for unsaturated MTC traffic

A SyMPHOnY of Integrated IoT Businesses: Closing the Gap between Availability and Adoption

Multi-factor authentication for wearables: Configuring system parameters with risk function

Comparative evaluation of radio propagation properties at 15 GHz and 60 GHz frequencies

Multi-factor authentication: A survey and challenges in V2X applications

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Secure and connected wearable intelligence for content delivery at a mass event: A case study
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Effects of Heterogeneous Mobility on D2D-and Drone-Assisted Mission-Critical MTC in 5G

Analytical performance estimation of network-assisted D2D communications in urban scenarios with rectangular cells

Facilitating the Delegation of Use for Private Devices in the Era of the Internet of Wearable Things

Flexible Spectrum Management in a Smart City within Licensed Shared Access Framework

Mobile Social Networking under Side-Channel Attacks: Practical Security Challenges

Modeling Unreliable Operation of mmWave-based Data Sessions in Mission-Critical PPDR Services

Reliability-centric analysis of offloaded computation in cooperative wearable applications

Safe, Secure Executions at the Network Edge: Coordinating Cloud, Edge, and Fog Computing

Time-dependent SIR analysis in shopping malls using fractal-based mobility models

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Wireless M-bus in industrial IoT: Technology overview and prototype implementation

Dynamic social trust associations over D2D communications: An implementation perspective
D2D communications for mobile devices: Technology overview and prototype implementation

Remote management of intelligent devices: Using TR-069 protocol in IoT

A Harmonized Perspective on Transportation Management in Smart Cities: The Novel IoT-Driven Environment for Road Traffic Modeling

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Dynamic trust management framework for robotic multi-agent systems

Optimizing network-assisted WLAN systems with aggressive channel utilization

Validating information security framework for offloading from LTE onto D2D links

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Implementing secure network-assisted D2D framework in live 3GPP LTE deployment

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A trial of yoking-proof protocol in RFID-based smart-home environment

Implementing a broadcast storm attack on a mission-critical wireless sensor network

Visualizing Big Data

3GPP LTE-assisted Wi-Fi-direct: Trial implementation of live D2D technology

Visualizing Big Data with Augmented and Virtual Reality: Challenges and Research Agenda

Securing Network-Assisted Direct Communication: The Case of Unreliable Cellular Connectivity

An Analytical Approach to SINR Estimation in Adjacent Rectangular Cells

Network-Assisted Device-to-Device Connectivity: Contemporary Vision and Open Challenges

Fairness characterization in contemporary IEEE 802.11 deployments with saturated traffic load

Towards Big Data Visualization for Augmented Reality

Characterizing the Effect of Packet Losses in Current WLAN Deployments

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