1. Record Nr. UNINA9910299316103321

Titolo	Communications and Networking : 11th EAI International Conference, ChinaCom 2016, Chongqing, China, September 24-26, 2016, Proceedings, Part I / / edited by Qianbin Chen, Weixiao Meng, Liqiang Zhao
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-66625-8
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XXII, 516 p. 270 illus.)
Collana	Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, , 1867-8211 ; ; 209
Disciplina	004.6
Soggetti	Computer communication systems Special purpose computers Computer simulation Data protection Computer system failures Computer Communication Networks Special Purpose and Application-Based Systems Simulation and Modeling Security System Performance and Evaluation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Intro -- Preface -- Organization -- Contents -- Part I -- Contents -- Part II -- Technical Sessions -- Transceiver Optimization in Full Duplex SWIPT Systems with Physical Layer Security -- 1 Introduction -- 2 System Model and Problem Formulation -- 3 Optimal Transmitter Design with ZF Receiver -- 4 Simulation Results -- 5 Conclusion -- References -- Robust Secure Transmission Scheme in MISO Interference Channel with Simultaneous Wireless Information and Power Transfer -- 1 Introduction -- 2 System Model and Problem Formulation -- 3 Robust Secure Transmission Scheme -- 4 Simulation Results -- 5 Conclusion -- References -- An Effective Limited Feedback Scheme for

FD-MIMO Based on Noncoherent Detection and Kronecker Product Codebook -- 1 Introduction -- 2 System Model -- 2.1 Beamforming Model with Feedback -- 2.2 3D Channel Model -- 3 Kronecker Product Codebook Construction -- 4 Channel Quantization Scheme -- 4.1 Duality Between Codebook Searching and Non-coherent Sequence Detection -- 4.2 Low Complexity Quantization for CSI -- 4.3 Complexity -- 5 Simulation Results and Discussions -- 5.1 Simulation Setup -- 5.2 3D-PSK vs. 2D-DFT -- 5.3 3D-PSK vs. 3D-DFT -- 6 Conclusion -- References -- Two-Stage Precoding Based Interference Alignment for Multi-cell Massive MIMO Communication -- 1 Introduction -- 2 System Model -- 3 Two-Stage Precoding Based IA Scheme -- 3.1 Proposed Transmission Scheme -- 3.2 Performance Analysis -- 4 Numerical Result -- 5 Conclusion -- References -- MAC Schemes -- Adaptive Energy-Saving Mechanism for SMAC Protocol in Wireless Sensor Network -- Abstract -- 1 Introduction -- 2 Adaptive Energy-Saving Mechanism for SMAC -- 2.1 Introduction of ASP -- 3 Simulation Results and Performance Analysis -- 4 Conclusion -- Acknowledgement -- References -- A Transmission Rate Optimized Cooperative MAC Protocol for Wireless Sensor Networks. Abstract -- 1 Introduction -- 2 Network Model -- 3 TRO-CMAC Protocol -- 3.1 Relay Information Table (RIT) -- 3.2 TRO-CMAC Protocol and Relay Selection Algorithm -- 3.3 Access Method of Cooperative Node -- 4 Performance Evaluation -- 4.1 Simulation Environment -- 4.2 Performance Metrics -- 4.3 Simulation Results -- 5 Conclusion -- Acknowledgements -- References -- Heterogeneous Control and Data Split Network for Precision Formation Flying of Distributed Spacecraft -- Abstract -- 1 Introduction -- 1.1 Architecture of Heterogeneous Control and Data Split Network for Distributed Spacecraft -- 1.2 Optimize the MANET Protocol Stack -- 2 Event-Driven MAC Protocol for Control Sub-network -- 2.1 Description of E-MAC Protocol in Control Sub-network -- 2.2 Analytical Model of E-MAC Protocol -- 2.3 Spectrum and Energy Efficiency of E-MAC Protocol -- 3 Performance Evaluation -- 3.1 Scenario I -- 3.2 Scenario II -- 4 Conclusion -- Acknowledgements -- References -- A Novel Feedback Method to Enhance the Graphical Slotted ALOHA in M2M Communications -- 1 Introduction -- 2 System Model -- 3 Feedback Enhanced Design -- 3.1 Motivation of Feedback on CSA -- 3.2 Overhead Analysis -- 3.3 Analysis on the Optimal NRE value -- 4 Numerical Results -- 5 Conclusion -- References -- A Hybrid Automatic Repeat reQuest Scheme Based on Maximum Distance Separable Codes -- 1 Introduction -- 2 System Model and Encoding -- 3 Decoding Process -- 4 Simulations -- 4.1 Case 1 -- 4.2 Case 2 -- 5 Conclusion -- References -- Energy-Efficient Resource Allocation in Distributed Antenna Systems -- 1 Introduction -- 2 System Model and Problem Formulation -- 3 Energy Efficient Resource Allocation with Distributed Antennas -- 3.1 Joint DAU and Subcarrier Assignment -- 3.2 Power Allocation Optimization -- 4 Simulation Results -- 5 Conclusion -- References -- Traffic Engineering and Routing Algorithms.
Applications of Genetic Algorithms in BGP-Based Interdomain Traffic Engineering -- Abstract -- 1 Introduction -- 2 Interdomain Traffic Engineering -- 3 Related Work -- 4 A Multi-objective Genetic Algorithm -- 4.1 Adding Filtering Mechanism -- 4.2 Expanding the Scope of Application of the Algorithm -- 5 Applications of the Genetic Algorithm -- 5.1 Gathering the Information of Topology and IGP Weights -- 5.2 Gathering the Information of BGP Routing -- 5.3 Collecting Traffic and the Validation of the Algorithm -- 5.4 Comparison with the Original Algorithm -- 5.5 Discussion on Different

Parameters -- 6 Conclusions -- References -- MP-SDWN: A Novel Multipath-Supported Software Defined Wireless Network Architecture -- Abstract -- 1 Introduction -- 2 MP-SDWN Architecture -- 2.1 Architecture of MP-SDWN -- 2.2 Use Cases -- 3 Performance Evaluation -- 3.1 Test-Bed Setup -- 3.2 Benchmark Performance of MVAP -- 3.3 Handover Performance -- 4 Conclusion -- Acknowledgments -- References -- Performance Analysis of Routing Algorithms Based on Intelligent Optimization Algorithms in Cluster Ad Hoc Network -- Abstract -- 1 Introduction -- 2 Cluster Ad Hoc Network Model -- 3 Principle of Intelligence Algorithms -- 3.1 Genetic Algorithm -- 3.2 Ant Colony Optimization -- 3.3 Particle Swarm Optimization -- 4 Network Performance Analysis -- 5 Conclusion -- Acknowledgment -- References -- Incentive Mechanism for Crowdsensing Platforms Based on Multi-leader Stackelberg Game -- 1 Introduction -- 2 System Model -- 3 Optimal Pricing Strategy Dealing with a Non-cooperative Game -- 4 Simulations and Discussions -- 4.1 Nash Equilibrium Between Crowdsensing Platforms -- 4.2 Optimal Pricing Strategy of Crowdsensing Platforms -- 4.3 Optimal Utility of Crowdsensing Platforms -- 4.4 Optimal Utility of Sensing Task Originator -- 5 Conclusion -- References.
Master Controller Election Mechanism Based on Controller Cluster in Software Defined Optical Networks -- Abstract -- 1 Introduction -- 2 Master/Slaves Mode and Controller Election -- 3 Design and Implementation of MCEM -- 3.1 Election Qualifications for MCEM -- 3.2 Master Election Algorithm of MCEM -- 3.2.1 Vote Procedure -- 3.2.2 Approval Procedure -- 4 Simulation Results -- 4.1 The Evaluation Indicators in Experiment -- 4.2 The Analysis of Numerical Results -- 5 Conclusion -- Acknowledgements -- References -- Security -- Performance Evaluation of Black Hole Attack Under AODV in Smart Metering Network -- 1 Introduction -- 2 Black Hole Attack in Smart Metering Network -- 2.1 AODV Routing Protocol -- 2.2 Black Hole Attack Under AODV -- 3 Simulation Setup and Performance Metrics -- 4 Simulation Results -- 4.1 Effect of Variation of ART and Hello Packet Interval on PDR -- 4.2 Effect of Variation of ART and Hello Packet Frequency on Average End-to-End Delay -- 4.3 Effect of Position of Malicious Meters on PDR -- 5 Conclusions -- References -- An Entropy-Based DDoS Defense Mechanism in Software Defined Networks -- Abstract -- 1 Introduction -- 2 Related Work -- 3 Principle of Entropy-Based DDoS Detection in SDN -- 3.1 SDN Profile -- 3.2 Principle of Entropy-Based DDoS Detection -- 3.3 The Essential Difference Between DDoS Attacks and Flash Crowds -- 4 Proposed Mechanism: EDDM -- 4.1 Initialization and Window Construction Phase -- 4.2 DDoS Attack Detection Phase -- 4.3 DDoS Attack Mitigation Phase -- 5 Simulation Results -- 5.1 DDoS Without Any Defense Mechanisms -- 5.2 DDoS with EDDM -- 5.3 The Flash Crowd and DDoS with EDDM -- 5.4 Discussions -- 6 Conclusion -- References -- Protecting Location Privacy Through Crowd Collaboration -- 1 Introduction -- 2 Problem Statement -- 2.1 Weighed Distance -- 2.2 Joint Differential-Distortion Privacy Metric.
2.3 Inference Privacy Metric -- 2.4 Utility Cost -- 2.5 Objective -- 3 Privacy Game -- 3.1 Optimal Strategies -- 3.2 Optimal Equilibrium Point -- 4 Performance Evaluation -- 4.1 Case 1: Impacts of POI Density -- 4.2 Case 2: Impacts of Privacy Level -- 4.3 Case 3: Tracing Real Devices -- 5 Conclusions -- References -- A Measurement and Security Analysis of SSL/TLS Deployment in Mobile Applications -- Abstract -- 1 Introduction -- 2 Related Work -- 3 Measurement Method -- 3.1 Data Collection -- 3.2 Measurement System -- 3.3 MITM Experiment -- 4 Measurement Results -- 4.1 SSL/TLS

Deployment on Applications -- 4.2 SSL Handshake Parameters -- 4.3 MITM Experiment Results -- 4.4 Discussion -- 5 Conclusion -- Acknowledgments -- References -- A Method for Countering Snooping-Based Side Channel Attacks in Smart Home Applications -- Abstract -- 1 Introduction -- 2 Related Work -- 3 Proposed Method -- 4 Evaluation -- 5 Conclusion and Future Work -- Acknowledgement -- References -- Coding Schemes -- FPGA-Based Turbo Decoder Hardware Accelerator in Cloud Radio Access Network (C-RAN) -- 1 Introduction -- 2 System Design -- 2.1 Virtualized SDR Platform -- 2.2 Cloud Base Stations -- 2.3 FPGA Hardware Accelerator -- 3 Turbo Decoder Design -- 3.1 Interface Design -- 3.2 Design of Turbo Decoder -- 3.3 Pipeline Process -- 3.4 Implementation of Turbo Decoder -- 4 Simulation and Evaluation -- 5 Conclusions and Future Work -- References -- Iterative Detection and Decoding for Spatially Coupled Multiuser Data Transmission -- 1 Introduction -- 2 System Model -- 3 Iterative Multiuser Detection and Decoding -- 3.1 Factor Graph Representation -- 3.2 Iterative Detection and Decoding Based on MPA -- 3.3 EXIT Chart -- 4 EXIT Chart Analysis and Numerical Results -- 5 Conclusion -- References -- Two Degree Forest Based LT Codes with Feedback -- Abstract -- 1 Introduction.
2 Preliminary.

Sommario/riassunto

The two-volume set LNICST 209-210 constitutes the post-conference proceedings of the 11th EAI International Conference on Communications and Networking, ChinaCom 2016, held in Chongqing, China, in September 2016. The total of 107 contributions presented in these volumes are carefully reviewed and selected from 181 submissions. The book is organized in topical sections on MAC schemes, traffic algorithms and routing algorithms, security, coding schemes, relay systems, optical systems and networks, signal detection and estimation, energy harvesting systems, resource allocation schemes, network architecture and SDM, heterogeneous networks, IoT (Internet of Things), hardware design and implementation, mobility management, SDN and clouds, navigation, tracking and localization, future mobile networks.