

1. Record Nr.	UNINA9910497083303321
Autore	Ma Maode
Titolo	Proceedings of the 4th International Conference on Telecommunications and Communication Engineering : ICTCE 2020, 4-6 December, Singapore
Pubbl/distr/stampa	Singapore : , : Springer Singapore Pte. Limited, , 2021 ©2022
ISBN	981-16-5692-4
Descrizione fisica	1 online resource (208 pages)
Collana	Lecture Notes in Electrical Engineering Ser. ; ; v.797
Soggetti	Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Contents -- Efficient Digital Beamforming for Bluetooth 5.1 Using Software Defined Radio -- 1 Introduction -- 2 System Model -- 2.1 BLE v5.1 System Characteristics -- 2.2 Architecture for the Digital Beamformer Using a Single Receiver -- 3 Uniform Linear Array Antenna Design -- 3.1 Array Antenna Results -- 4 Acquisition and Processing of the Multiplexed Sign -- 4.1 Acquisition of Signals -- 4.2 Signal's Processing -- 5 Experimentation and Results -- 6 Conclusion -- References -- Discussion on Suppression Coefficient of Projectile-Carried Communication Jamming -- 1 Introduction -- 2 The Concept of Jamming Suppression Coefficient -- 3 Common Values of Jamming Suppression Coefficient -- 4 Definition of Jamming Level -- 5 Value and Definition of Suppression Coefficient of Projectile-Carried Communication Jamming -- 6 Conclusions -- References -- Research of Key Technique of Simulation Test Grid for C4ISR System -- 1 Introduction -- 1.1 A Subsection Sample -- 2 Basic Concept and Connotation -- 3 Simulation Grid Architecture -- 4 Key Technology in Simulation Grid -- 4.1 Simulation Task Community Constructing Technology On-Demand -- 4.2 Task Community Concurrent Operation Technology -- 4.3 Information On-Demand Dispatch Technology -- 5 Typical Application Case -- 6 Conclusion -- References -- Random Access Performance Evaluation and Improvements of the LDACS -- 1 Introduction -- 2 LDACS System Design and Simulation Environment --

2.1 Random Access Procedure -- 2.2 Flight Scenarios/Channel Types -- 2.3 LDACS Simulator Environment -- 2.4 Synchronization Methods -- 3 Simulation Results -- 3.1 Random Access Synchronization -- 3.2 Necessary Doppler Accuracy -- 4 Possible RA Frame Improvements -- 5 Conclusion -- References -- Energy Efficient Power Allocation in Massive MIMO Systems with Power Limited Users -- 1 Introduction -- 2 System Model.

3 Proposed Solution -- 3.1 EE Maximization When Problem (10) is Feasible -- 3.2 User Admission When Problem (10) is Infeasible -- 4 Simulation Results -- 5 Conclusion -- References -- A High-Gain Low-Noise RF Front-End Design for WLAN Receivers -- 1 Introduction -- 2 Design Theories and Target Specifications -- 3 Design Specifics for Building Blocks -- 4 System Level Simulation Results -- 5 Conclusion -- References -- Parallel Optical Wireless Communication System with Hierarchical Nonorthogonal Code Shift Keying -- 1 Introduction -- 2 System Construction -- 2.1 Construction of a Nonorthogonal Code -- 2.2 Transmitter and Receiver Operations -- 2.3 Data Transmission Efficiency -- 3 Transmission Efficiency Analysis -- 4 Numerical Results -- 5 Conclusion -- References -- JomIoT Medic: Saving Lives -- 1 Medication Adherence and Medication Reminder Device -- 1.1 Value Creations -- 2 Legacy and Related Works of Medication Reminders -- 3 Methodology -- 4 Results Findings -- 5 Conclusion, Limitation and Future Works -- References -- Cross-Train: Machine Learning Assisted QoT-Estimation in Un-used Optical Networks -- 1 Introduction -- 2 Networks Model and Data Generation -- 3 GSNR Statistical Analysis -- 4 Visual Inspection of Machine Learning Module -- 5 Results and Discussion -- 6 Conclusion -- References -- Deep Reinforcement Learning Based Routing Scheduling Scheme for Joint Optimization of Energy Consumption and Network Throughput -- 1 Introduction -- 2 Network Model and Problem Formulation -- 2.1 Link Model -- 2.2 Traffic Model -- 2.3 Problem Formulation -- 2.4 Problem Solution -- 3 DRL Based Routing Scheme (PEARL) -- 4 Simulation Results and Analysis -- 5 Conclusion -- References -- A Novel Visible Light Communication System Based on a SiPM Receiver -- 1 Introduction -- 2 Comparison with Other Detector Technologies.

3 SiPM Based VLC Prototype Implementation and Simulation -- 3.1 Prototype VLC System Using SiPM -- 3.2 Pulse Reconstruction -- 4 Simulation Results -- 4.1 Single Photon Level Detection -- 4.2 Pulse Shape and SiPM Band Width -- 4.3 Reconstruction Precision and Required Time -- 5 Conclusion -- References -- Research on Peak-Detection Algorithms of Fiber Bragg Grating Demodulation -- 1 Introduction -- 2 Research Focus of Peak-Detection Algorithm -- 3 Wavelength Peak-Detection Algorithm -- 3.1 Traditional Direct Peak-Detection Algorithm -- 3.2 Classic Fitting Peak-Detection Algorithm -- 3.3 Innovative Improved Algorithm -- 3.4 Comprehensive Comparison of Commonly Used Algorithms -- 4 Conclusion -- References -- Maintenance of Utilities Communication Equipment. From Normal to Excellence -- 1 Introduction -- 2 Excellent at Different Stages -- 2.1 Excellent at Design Stage of the Equipment -- 2.2 Excellent at Engineering Stage of the Equipment -- 2.3 Excellent at Commissioning Stage of the Equipment -- 2.4 Excellent at Maintenance Stage of the Equipment -- 3 Excellence and Equipment Age -- 4 Supporting Factors for Excellent Maintenance -- 5 Case Study (Implementation of Equipment Excellence Model) -- 6 Conclusion -- References -- Development of a Two-Level Output Vehicle Safety Device Initiated by the Driver's Eye Movement Patterns -- 1 Introduction -- 1.1 Driver's Level of Drowsiness -- 1.2 Eye Movements

in Predicting Driver's Drowsiness Level -- 2 Methodology -- 2.1 Project Development -- 2.2 Operation Testing and Procedure -- 3 Results -- 4 Conclusion -- References -- Design and Implementation of V-Band MMIC Low Noise Amplifier in GaAs mHEMTs Process -- 1 Introduction -- 2 Circuit Design and Simulation -- 3 Conclusion -- References -- Hidden Risks in Utilities Communication Panels -- 1 Introduction -- 2 Examples of Communication Panel Hidden Risks. 2.1 Unorganized Cables Inside the Panel -- 2.2 Wrong or Missing Labels -- 2.3 Existence of Dust -- 2.4 Nonfunctional of Panel Lights -- 3 Mitigating the Hidden Risks -- 3.1 Design Stage -- 3.2 Commissioning Stage -- 3.3 Maintenance Stage -- 4 Supporting Factors for Mitigating Risks -- 4.1 Knowledge Sharing -- 4.2 Effective Communication -- 4.3 Documentation and Records -- 4.4 Involvement of Original Equipment Manufacturer (OEM) -- 4.5 Conducting Risk Assessment -- 5 Conclusion -- References -- JomSnapBuy: Search and Buy Product with a Snap -- 1 Introduction -- 2 Methodology -- 3 Results and Findings -- 4 Conclusion, Limitation, and Future Work -- References -- Base Station Mobile Traffic Prediction Based on ARIMA and LSTM Model -- 1 Introduction -- 2 ARIMA Methodology -- 2.1 Theory of ARIMA Model -- 2.2 Evaluation Methods of Model Sufficiency -- 3 Base Station Flow Prediction Based on ARIMA -- 3.1 Base Station Traffic Data -- 3.2 Modeling Traffic Data Using ARIMA Method -- 3.3 AMIRA Model Evaluation -- 4 LSTM Methodology -- 4.1 Theory of LSTM Model -- 4.2 Methods for Overfitting -- 4.3 Evaluation Methods of Model Sufficiency -- 5 Base Station Flow Prediction Based on LSTM -- 5.1 Modeling Traffic Data Using LSTM Method -- 5.2 LSTM Model Evaluation -- 6 Conclusions -- References -- Particle Swarm Optimized Optical Directional Couplers with Ultrasmall Size and Wide Bandwidth -- 1 Introduction -- 2 Technical Work -- 3 Conclusion -- References -- Lateral Etched Tunnel Junction Apertures for 1.3m Vertical-Cavity Surface-Emitting Lasers -- 1 Introduction -- 2 Experimental -- 3 Results and Discussion -- 4 Conclusion -- References -- Neural Network Deployment on Edge via OPC UA Protocol -- 1 Introduction -- 2 Information Model Definition -- 2.1 Model Definition -- 2.2 Model Instantiation -- 2.3 Program Activation -- 3 Inference Engine Deployment. 3.1 Mobile Neural Network Instruction -- 3.2 Interface Connection -- 4 Evaluation -- 4.1 Program Volume -- 4.2 Memory Usage -- 4.3 Time Consumption -- 5 Conclusion -- References -- Author Index.

---