

1. Record Nr.	UNISA996465311803316
Titolo	Mobile Web and Intelligent Information Systems [[electronic resource]] : 13th International Conference, MobiWIS 2016, Vienna, Austria, August 22-24, 2016, Proceedings / / edited by Muhammad Younas, Irfan Awan, Natalia Kryvinska, Christine Strauss, Do van Thanh
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-44215-5
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XIV, 444 p. 147 illus.)
Collana	Information Systems and Applications, incl. Internet/Web, and HCI ; ; 9847
Disciplina	004.165
Soggetti	Application software Computer communication systems User interfaces (Computer systems) Software engineering E-commerce Computers and civilization Information Systems Applications (incl. Internet) Computer Communication Networks User Interfaces and Human Computer Interaction Software Engineering e-Commerce/e-business Computers and Society
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Organization -- Contents -- Mobile Web - Practice and Experience -- An Android Kernel Extension to Save Energy Resources Without Impacting User Experience -- 1 Introduction -- 2 Related Work -- 3 Implementing an Energy Aware Kernel Module for Android -- 4 Evaluation -- 4.1 Experiment 1: Performance -- 4.2 Experiment 2: Battery Runtime -- 4.3 Threats to Validity -- 5 Conclusions and Future Work -- References -- Mobile Soundscape Mixer - Ready for Action -- Abstract -- 1 Introduction -- 2 System

Overview -- 3 Design Process of the Mobile Soundscape Mixer Application -- 4 Guidelines and Implementation for the Mobile Soundscape Mixer Application -- 5 Performance Evaluation -- 6 Discussion -- 7 Conclusions -- Acknowledgements -- References --

Onde Chiare: A Mobile Application to Mitigate the Risk Perception from Electromagnetic Fields -- 1 Introduction -- 2 Electromagnetic Fields and Public Health -- 2.1 EMF Risk Perception -- 3 Onde Chiare: Design and Implementation -- 3.1 Use Case and Scenario -- 3.2 General Architecture -- 3.3 Server Side -- 3.4 Android App -- 4 Conclusion and Future Works -- References --

Ringtone Adaptation Based on Location and Surrounding Noise -- Abstract -- 1 Introduction -- 2 Problem Definition -- 3 New Solution -- 4 Implementation -- 5 Developed Application Testing - Solution -- 6 Conclusions -- Acknowledgement -- References --

Loop Speed Trap Data Collection Method for an Accurate Short-Term Traffic Flow Forecasting -- 1 Introduction -- 2 Cloud Based-Service for Traffic Flow Forecasting -- 3 Real-Time Data Collection Method for Traffic Flow Forecasting -- 3.1 Foreseen Arrival Time Parameter -- 3.2 Busiest Arrival Time for Safety Traffic Flow -- 4 Linear Regression for Traffic Flow Forecasting -- 5 Conclusion -- References --

Advanced Web and Mobile Systems. Computational Thinking Through Mobile Programming -- 1 Introduction -- 2 Background -- 3 Course Description -- 3.1 Motivation and Goal -- 3.2 Rationale -- 3.3 Tools -- 3.4 Structure -- 3.5 Assessment -- 4 Case Study -- 5 Results -- 6 Conclusion and Future Work -- References --

Realistic Offloading Scheme for Mobile Cloud Computing -- Abstract -- 1 Introduction -- 2 System Design Architecture -- 2.1 Mobile Side -- 2.2 Cloud Side -- 3 Cost Prediction Models -- 3.1 Problem Formulation -- 3.2 Mobile Execution Cost Prediction -- 3.3 Cloud Execution Cost Prediction -- 4 Realistic Decision Algorithm (RDA) -- 4.1 RDA Algorithm Description -- 4.2 RDA Algorithm Overhead -- 5 Simulation Results -- 6 Related Work -- 7 Conclusion -- References --

Model Driven Development Approaches for Mobile Applications: A Survey -- 1 Introduction -- 2 Related Work -- 3 Dimensions of Analysis -- 3.1 Development Process Phases -- 3.2 Covered Mobile App Aspects -- 3.3 Model-Driven Development Techniques Applied -- 3.4 Generated Apps Perspective -- 4 Overview of MDD Approaches -- 4.1 Research Approaches -- 4.2 Commercial Solutions -- 4.3 Classification -- 5 Trends and Outlook -- 5.1 Multilevel Code Generation Approaches -- 5.2 Single Level Code Generation Approaches -- 5.3 Development Process -- 5.4 Mobile App Aspects -- 5.5 Executability -- 5.6 Native, Cross-Platform or Web Applications -- 5.7 Cross Platform Development -- 5.8 Lack of Standard Mobile Modeling Language -- 6 Conclusions -- References --

Fuzzy Ontology Based Model for Image Retrieval -- Abstract -- 1 Introduction -- 2 Related Work -- 2.1 Text Based Retrieval Systems -- 2.2 Ontology Based Retrieval Systems -- 2.3 Fuzzy Ontology Based Retrieval Systems -- 3 Proposed Methodology -- 3.1 Fuzzy Ontology Construction -- 3.2 Image Retrieval -- 3.3 Walk-Through Example -- 4 Experimental Results -- 5 Conclusion -- References.

Face-Based Difficulty Adjustment for the Game Five in a Row -- Abstract -- 1 Introduction -- 2 Problem Definition -- 2.1 Genetic Algorithms - Minimax -- 2.2 Face-Based Difficulty Adjustment of the Game According to the Shots from the Front Camera -- 3 New Solution -- 3.1 Design and Realisation of Tournament Selection -- 4 Implementation Issues of Developed Game -- 4.1 Implementation of the Game Algorithm -- 4.2 Implementation of the Technologies for the Face Recognition -- 4.3 Implementation Issues of Face-Based Difficulty Adjustment -- 4.4 Implementation Issues of Real-Time Option for

Artificial Intelligence -- 5 Testing of Developed Solution -- 5.1 Testing of the Newly Designed Algorithm -- 5.2 Comparison of the Technologies for the Face Detection in the Image -- 5.3 Speed Performance Testing -- 6 Conclusions -- Acknowledgement -- References -- Security of Mobile Applications -- Adaptive Trust Scenarios for Mobile Security -- 1 Introduction -- 2 Trust in Mobile Systems -- 3 Scenarios for Adaptive Trust -- 3.1 S1: Based on System Configuration -- 3.2 S2: Communication Interface Diversity -- 3.3 S3: In Secure Environment -- 3.4 S4: In Open Environment -- 3.5 S5: Move Along Environments -- 3.6 S6: Having Connections with Many Entities -- 3.7 Applying Trust Models to the Scenarios -- 3.8 Numerical Evaluation -- 4 Conclusion -- References -- Access Control Approach in Development of Mobile Applications -- 1 Introduction -- 2 Mobile Security - Trends and Vulnerabilities -- 2.1 Security Risks in iOS Application Development -- 2.2 Major Vulnerabilities of Android Applications -- 3 Secure Development Model -- 3.1 Data Storage Security Model -- 3.2 Data Access Security Model -- 3.3 Data Transfer Security Model -- 4 Access Control Model Approach -- 5 iSec Framework as the Implementation of SDS Model -- 6 Conclusions -- References.

Using Mobile Technology in National Identity Registration -- Abstract -- 1 Introduction -- 2 Definition of Identity -- 3 The Mobile Identity Concept -- 3.1 Establishment of Citizen Identity - Birth Registration -- 3.2 Obstacles to Birth Registration in Pakistan -- 3.3 Mobile Birth Registration in Pakistan -- 4 Value Proposition -- 5 Social Benefit Analysis -- 6 Conclusion -- References -- Strengthening Mobile Network Security Using Machine Learning -- Abstract -- 1 Introduction -- 2 Related Works -- 2.1 Security Research Labs (SRLabs) -- 2.2 P1 Security -- 2.3 SBA Research -- 3 Threats and Vulnerabilities in the Mobile Network -- 4 Briefly About Machine Learning -- 5 How Can Machine Learning Improve Mobile Network Security -- 5.1 Zero Day Attacks -- 5.2 Challenges in the Construction of Conclusive Attack Signatures -- 6 Case Study: The IMSI Catcher -- 6.1 Short About IMSI Catcher -- 6.2 Challenges in the Detection of IMSI Catcher -- 6.3 Challenges in the Establishment of IMSI Catcher Signature -- 6.3.1 Handover from 3G to 2G -- 6.3.2 Location Update -- 6.3.3 Relation Between IMSI and IMEI -- 6.4 A Machine Learning Based IMSI Catcher Detection -- 7 Conclusion -- References -- Secured Authentication Using Anonymity and Password-Based Key Derivation Function -- Abstract -- 1 Introduction -- 2 Background -- 2.1 Authentication Scheme Comparison -- 2.2 Anonymity in Authentication Scheme -- 2.3 Password-Based Key Derivation Function 2 (PBKDF2) -- 3 The Proposed Scheme -- 3.1 Protocol Description -- 4 Vulnerabilities and Security Analysis -- 4.1 Cloud Vulnerabilities -- 4.2 Possible Attacks -- 5 Conclusion -- Acknowledgment -- References -- Mobile and Wireless Networking -- Optimal Resource Allocation for Non-Real Time Visible Light Communication Networks -- 1 Introduction -- 2 System Description and Problem Formulation -- 2.1 System Description. 2.2 Problem Formulation -- 2.3 Piecewise Linear Formulation -- 3 VNS Decomposition Procedure -- 4 Numerical Results -- 5 Conclusions -- References -- On Information Sharing Scheme for Automatic Evacuation Guiding System Using Evacuees' Mobile Nodes -- 1 Introduction -- 2 Related Work -- 3 Automatic Evacuation Guiding System -- 4 Proposed Scheme -- 4.1 Selection of Blocked Road Segments Based on Evacuees' Views -- 4.2 Communication Through DTN Routing -- 5 Simulation Results -- 5.1 Simulation Model -- 5.2 Appropriate Margin of View -- 5.3 Network Load -- 6 Conclusions -- References -- Cognitive Downlink Interference LTE Femtocell -- Abstract -- 1 Introduction -- 2

Related Works -- 3 Problems -- 4 Simulation -- 5 Results and Discussion -- 6 Conclusion -- References -- Correlation Properties of QOCCC Based on 1D-CCC with Parameters (N, N, 2N) and (N, N, N) -- Abstract -- 1 Introduction -- 2 CCC Definitions -- 2.1 One-Dimensional CCCs -- 2.2 Two-Dimensional CCCs -- 3 QOCCC Properties -- 3.1 Parameters -- 4 Conclusion -- Acknowledgment -- References -- Heterogeneous Traffic Modeling and Analysis for Wireless Sensor Networks -- Abstract -- 1 Introduction -- 2 Applications -- 2.1 Smart Healthcare System -- 3 Related Work -- 4 System Model and Assumptions -- 4.1 Heterogeneous Traffic Model -- 4.2 Sensor Node Queuing Model -- 5 Traffic Model of a Sensor Node -- 6 Network Performance Estimation -- 6.1 Average Loss Probability of Packet of Type k -- 6.2 Average Network Throughput of Packet of Type k -- 6.3 Average Network Delay of Packets of Type k -- 7 Network Performance -- 8 Conclusion -- References -- Duco - Hybrid Indoor Navigation -- 1 Introduction -- 2 Background -- 3 Implementation -- 3.1 Indoor Map Graph Generation -- 3.2 Initial Location Determination -- 3.3 Navigation -- 4 Evaluation -- 4.1 Evaluation Environments -- 4.2 Evaluation Hardware. 4.3 Small Environment Test - Home Scenario.

Sommario/riassunto

This book constitutes the refereed proceedings of the 13th International Conference on Mobile Web and Intelligent Information Systems, MobiWIS 2016, held in Vienna, Austria, in August 2016. The 36 papers presented in this volume were carefully reviewed and selected from 98 submissions. They were organization in topical sections named: mobile Web - practice and experience; advanced Web and mobile systems; security of mobile applications; mobile and wireless networking; mobile applications and wearable devices; mobile Web and applications; personalization and social networks. .
