

1. Record Nr.	UNINA9910299273803321
Titolo	Context-Aware Systems and Applications, and Nature of Computation and Communication : 6th International Conference, ICCASA 2017, and 3rd International Conference, ICTCC 2017, Tam Ky, Vietnam, November 23-24, 2017, Proceedings / / edited by Phan Cong Vinh, Nguyen Ha Huy Cuong, Emil Vashev
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-77818-8
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XIII, 237 p. 72 illus.)
Collana	Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, , 1867-822X ; ; 217
Disciplina	004
Soggetti	Information storage and retrieval systems Computer networks Computers, Special purpose Artificial intelligence Information Storage and Retrieval Computer Communication Networks Special Purpose and Application-Based Systems Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Preface -- Organization -- Contents -- Context-Aware Systems and Applications -- A Resource-Aware Preference Model for Context-Aware System -- 1 Introduction -- 2 Related Work -- 3 Motivation -- 4 Resource-Aware Preference Model -- 4.1 Context-Aware System Architecture -- 4.2 Rule Structure -- 4.3 Preference Manager Layer -- 5 Derived-Context Based User Preference -- 5.1 Preference Level Monitor (PLM) -- 6 A Simple Case Study -- 6.1 Context-Based Preferences -- 6.2 Rule-Based Preferences -- 7 Conclusion and Future Work -- References -- A Context Adaptive Framework for IT Governance, Risk, Compliance and Security -- Abstract -- 1 Introduction -- 2 GRC and Security -- 3 IT GRC -- 4 IT

Security -- 5 IT GRC and IT Security -- 6 An Integrated IT GRCS Framework -- 7 Conclusion -- References -- Hybrid Classifier by Integrating Sentiment and Technical Indicator Classifiers -- Abstract -- 1 Introduction -- 2 Research Methodology -- 2.1 Sentiment Definition -- 2.1.1 Bullish and Bearish -- 2.1.2 Sentiment Ratio -- 2.1.3 Sentiment Trading Strategies (STS) -- 2.1.4 Sentiment Classifier Formula -- 2.2 Technical Indicator -- 2.2.1 Relative Volatility Index (RVI) -- 2.2.2 Money Flow Index (MFI) -- 2.2.3 Relative Strength Index (RSI) -- 2.3 Classification Algorithms -- 2.3.1 Technical Indicator Classifiers -- 2.3.2 Sentiment Classifiers -- 2.3.3 Hybrid Classifiers -- 3 Experiments and Results -- 3.1 Datasets -- 3.2 Experiments -- 3.3 Results -- 4 Conclusion and Discussion -- References -- Visualizing Space-Time Map for Bus -- Abstract -- 1 Introduction -- 2 Visual Features -- 2.1 The Capacity of Human Vision -- 2.2 The Visual Features -- 2.3 The Retinal Variables -- 3 Approaching Temporal Geography to Making Space-Time Bus Map -- 3.1 Space-Time Map -- 3.2 Space-Time Map for Representing Bus Network.

4 Approaching Temporal Geography and Visualization to Creating Visualized-Space-Time Bus Map -- 4.1 Reducing the Thickness of Screen -- 4.2 Creating Visualized-Space-Time Bus Map -- 4.3 Improving Visual Features of Visualized-Space-Time Bus Map -- 5 Conclusion -- References -- Generation of Power State Machine for Android Devices -- 1 Introduction -- 2 Formal Analysis of Android Applications' Power Consumption -- 2.1 Analysis of the Power State in Mobile Applications for a Hardware Component -- 2.2 Analysis Power State in Mobile Applications -- 2.3 Optimize Power Consumption Model for Each Specific Application -- 3 Implementation -- 4 Related Work -- 5 Conclusion -- References -- Modeling Self-adaptation - A Possible Endeavour? -- Abstract -- 1 Introduction to Self-adaptation -- 2 Correct Self-adaptation -- 3 Modeling Self-adaptation with KnowLang -- 4 Case Study -- 4.1 Modeling Self-adaptation that Adds on Safety -- 4.2 Testing the Self-adaptation Model -- 5 Conclusion -- Acknowledgements -- References -- Enhancement of Wu-Manber Multi-pattern Matching Algorithm for Intrusion Detection System -- Abstract -- 1 Introduction -- 2 Background -- 2.1 Snort and Pattern Matching Algorithms -- 2.2 Wu-Manber Algorithm -- 2.3 Bloom Filter -- 3 Related Work -- 4 Proposed Algorithm -- 4.1 Preprocessing Phase -- 4.2 Matching Phase -- 5 Experiment and Performance Evaluations -- 5.1 Experimental Data -- 5.2 Experimental Results -- 6 Conclusions -- References -- Goal-Capability-Commitment Based Context-Aware Collaborative Adaptive Diagnosis and Compensation -- Abstract -- 1 Introduction -- 2 Technology Base -- 2.1 Capability-Commitment-Goal Representation -- 2.1.1 Capability -- 2.1.2 Commitment -- 2.1.3 Adaptation Goal -- 2.2 Semantic Matching -- 3 Our Approach -- 3.1 Failure Diagnosis -- 3.2 Capability and Commitment Compensation -- 4 Experiments and Discussion.

5 Conclusion -- Acknowledgment -- References -- Traffic Incident Recognition Using Empirical Deep Convolutional Neural Networks Model -- 1 Introduction -- 2 Convolutional Neural Networks (CNN) Based Approach to Traffic Incident Detection -- 2.1 Proposed CNN Model -- 2.2 The System for Traffic Incident Detection -- 3 Experimental Results -- 4 Conclusion -- References -- Block-Moving Approach for Speed Adjustment on Following Vehicle in Car-Following Model -- Abstract -- 1 Introduction -- 2 Related Works -- 3 The Block-Moving Approach -- 3.1 The Clearance of a Moving Vehicle -- 3.2 Moving-Block Approach to Adjusting Follower Speed -- 4 Headway-Based Controlling Follower Speed -- 5 Conclusion -- References -- The Context-Aware Calculating Method in Language

Environment Based on Hedge Algebras Approach to Improve Result of Forecasting Time Series -- Abstract -- 1 Introduction -- 2 Preliminaries -- 2.1 Fuzzy Time Series -- 2.2 Some Basis Concepts of Hedge Algebras -- 3 Proposed Method -- 3.1 Rule for Adjusting the Fuzzy Logical Relationships -- 3.2 Method for Partitioning the Universe of Discourse -- 3.3 Algorithm for Forecasting -- 4 Empirical Result -- 4.1 We Test the Proposed Method on the Time Series that are Enrollments at University of Alabama -- 4.2 Test of Forecasting TAIEX Index -- 5 Conclusion -- References -- Algebraic Operations in Fuzzy Object-Oriented Databases Based on Hedge Algebras -- 1 Introduction -- 2 The Basic Concepts -- 2.1 Hegde Algebra -- 2.2 Neighborhood Level -- 2.3 Fuzzy Object-Oriented Database -- 3 Evaluation of Duplicates in Fuzzy Objects -- 3.1 Approximation Level k -- 3.2 Redundant Fuzzy Objects -- 4 Fuzzy Algebraic Operations -- 4.1 Algebraic Operations for Fuzzy Objects -- 4.2 Algebraic Operations for Fuzzy Classes -- 4.3 Fuzzy Queries -- 5 Conclusion -- References.

Context-Adaptive Values-Based Games for the Young: Responsible Decision Making for a Sustainable World -- Abstract -- 1 Introduction -- 2 Values and Sustainability -- 3 Responsible Decision-Making in Games -- 4 Context-Adaptive Games for Inculcating Values in the Young -- 5 Design of Context-Adaptive Values-Based Games -- 5.1 Scenario 1: Context-Adaptive Values-Based Snakes and Ladders -- 5.2 Scenario 2: Context-Adaptive, Decision-Driven Story of Helpfulness and Kindness -- 6 Conclusion -- References -- Applying and Deploying Cyber Physical System in Monitoring and Managing Operations Under Mines and U ... -- Abstract -- 1 Introduction -- 1.1 Developing a Cyber Physical System for Monitoring and Managing Operations Under Mines and Underg ... -- 1.2 New Technologies Applied in the Project -- 2 The Building of Database Structure -- 2.1 System Software -- 3 Conclusion -- References -- The Method of Maintaining Data Consistency in Allocating Resources for the P2P Network Model -- 1 Introduction -- 2 Related Work -- 3 The Model Structure Tree Broadcasts Resource Allocation in Heterogeneous Distributed Platforms -- 4 Analytical Model for Resource Allocation in Heterogeneous Distributed Platforms -- 4.1 Queueing Model -- 4.2 Availability and Latency Computation -- 5 Algorithm -- 6 Experiments and Results -- 7 Conclusion and Future Works -- References --

Fragmentation in Distributed Database Design Based on KR Rough Clustering Technique -- Abstract -- 1 Rationale -- 2 Some Related Concepts -- 2.1 Data Discretization and Attribute Selection, Attribute Extraction According to Rough Set Approach -- 2.2 Information System, Indistinguishable Relation -- 2.3 Reference-Specific Vector and Similarity -- 3 Proposed Vertical Fragmentation Algorithm Based on KR Rough Clustering -- 3.1 KR Rough Clustering Algorithm -- 3.2 Proposed KR Rough Clustering Algorithm.

3.3 Evaluation of KR Rough Clustering Algorithm -- 4 Experimental Results of KR Rough Clustering Algorithm -- 5 Conclusion -- References -- Nature of Computation and Communication --

Architectural Framework for Context Awareness and Health Conscious Applications on Mobile Devices -- Abstract -- 1 Introduction -- 2 Related Research -- 2.1 Contextual and Context Aware -- 2.2 Contextual Aware Applications in Health Care -- 3 Modeling Context Aware Sensibility for Mobile Systems -- 3.1 Logical Description Knowledge Base -- 3.2 Ontology -- 3.3 Multi-agent System -- 4 Framework for Context-Aware Healthcare Applications on Mobile System -- 4.1 Architecture Framework -- 4.2 Mechanism of Operation -- 5 Conclusion -- References -- Holistic Personas and the Five-Dimensional Framework to Assist Practitioners in Designing Context-

Aw ... -- Abstract -- 1 Introduction -- 2 Background and Related Work -- 3 Methodology -- 3.1 The Five-Dimensional Requirements Elicitation Framework -- 3.2 The Design of Online AIS Learning Resources Using Holistic Personas -- 3.3 Procedure -- 4 Results -- 5 Discussion -- 6 Implications and Limitations of Our Findings -- 7 Conclusion and Future Research -- Acknowledgements -- References -- Abnormal Behavior Detection Based on Smartphone Sensors -- Abstract -- 1 Introduction -- 2 The Proposed Framework -- 2.1 The Feature Selection -- 2.2 Abnormal Behavior Analysis -- 2.3 Monitoring Application -- 3 Experiment and Results -- 3.1 Experiment Environment -- 3.2 The Collected and Processing Data -- 3.3 The Abnormal Behavior Analysis Results -- 4 Conclusion and Future Works -- Acknowledgments -- References -- An Effective of Data Organizing Method Combines with Naive Bayes for Vietnamese Document Retrieval -- Abstract -- 1 Introduction -- 2 Related Works -- 3 Organize Documents in the Warehouse -- 3.1 Feature Selection. 3.2 Organize Document Based on Clustering.

Sommario/riassunto

This book constitutes the refereed post-conference proceedings of the International Conferences ICCASA and ICTCC 2017, held in November 2017 in Tam Ky City, Vietnam. The 23 revised full papers presented were carefully selected from 31 submissions. The papers of ICCASA cover a wide spectrum in the area of context-aware-systems. CAS is characterized by its self-facets such as self-organization, self-configuration, self-healing, self-optimization, self-protection used to dynamically control computing and networking functions. The papers of ICTCC cover formal methods for self-adaptive systems and discuss natural approaches and techniques for computation and communication.
