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4.7. Removal of the terrain effect; 4.8. Wiener filters; References; Chapter 5. Digital Filtering of Maps II; 5.1. Inverse filtering; 5.2. Least squares inversion (2D distribution); 5.3. Least squares inversion (3D distribution); 5.4. Texture analysis; References; Chapter 6. Parameter Estimation; 6.1. Maximum likelihood (ML) estimation; 6.2. ML estimation source parameters; 6.3. Least squares inverse (non-linear); References; Subject index

Sommario/riassunto

When some useful information is hidden behind a mass of unwanted information we often resort to information processing used in its broad sense or specifically to signal processing when the useful information is a waveform. In geophysical surveys, in particular in aeromagnetic and gravity surveys, from the measured field it is often difficult to say much about any one specific target unless it is close to the surface and well isolated from the rest. The digital signal processing approach would enable us to bring out the underlying model of the source, that is, the geological structure. Some of

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Nota di contenuto	<p>Intro -- Preface -- Organization -- Contents - Part II -- Contents - Part I -- Pattern Mining -- SMIM Framework to Generalize High-Utility Itemset Mining -- 1 Introduction -- 2 Problem Statement -- 3 Related Work -- 4 Examples of SMIM -- 5 Algorithmic Framework for SMIM -- 5.1 Projection-Based Algorithms -- 5.2 Tree-Based Algorithms -- 5.3 SM-Miner Algorithm -- 5.4 Empirical Observations -- References -- TKQ: Top-K Quantitative High Utility Itemset Mining -- 1 Introduction -- 2 Related Work -- 3 Preliminaries and Problem Definition -- 4 The TKQ Algorithm -- 5 Experiments -- 6 Conclusion -- References -- OPECUR: An Enhanced Clustering-Based Model for Discovering Unexpected Rules -- 1 Introduction -- 2 Background -- 3 Related Work -- 4 Proposed Method: OPECUR Model -- 4.1 Generating Association Rule -- 4.2 Clustering Algorithm -- 5 Experimental Evaluation -- 5.1 Experimental Setup -- 5.2 Experiment 1: Execution Time Comparison -- 5.3 Experiment 2: Clustering Process Comparison -- 5.4 Experiment 3: Evaluation of Unexpected Rules -- 6 Conclusion -- References -- Tourists Profiling by Interest Analysis -- 1 Introduction -- 2 State of the Art -- 3 Tourism Movement's Data Model -- 3.1 Sequences Dataset -- 3.2 Sequential Rule Mining -- 3.3 Measure of Interest -- 3.4 Graph Movement Model -- 4 Community Detection -- 4.1 Mainstream Nodes -- 4.2 Spheres of Influence -- 4.3 Similarity Measure -- 4.4 Profiling -- 5 Experiments -- 5.1 Measure of Interest -- 5.2 Mainstream Monuments -- 5.3 Sphere of Influence -- 5.4 Clustering Analysis -- 5.5 Discussions -- 6 Conclusion -- References -- Extracting High Profit Sequential Feature Groups of Products Using High Utility Sequential Pattern Mining -- 1 Introduction -- 1.1 Opinion Mining (OM) and Sentiment Analysis (SA) -- 1.2 High Utility Sequential Pattern Mining (HUSPM) -- 1.3 Problem Definition -- 1.4 Contributions. 2 Related Work -- 3 Proposed High Profit Sequential Feature Groups Based on High Utility Sequences (HPSFG_HUS) System -- 4 Experimental Evaluation -- 4.1 Dataset and Implementation Details -- 4.2 Comparison Analysis of HPSFG_HUS System -- 5 Conclusion and Future Work -- References -- Game Achievement Analysis: Process Mining Approach -- 1 Introduction -- 2 Background -- 2.1 Process Mining -- 2.2 Achievements -- 3 Related Work -- 4 Data Preparation -- 4.1 Steam Achievements Extraction -- 4.2 Conversion to Event Log -- 4.3 Game Categorization -- 4.4 Selected Games -- 4.5 Data Filtering -- 5 Analysis of Game Achievements -- 5.1 Typical Playthrough -- 5.2 Comparing Player Behaviour -- 5.3 Game Level Analysis -- 5.4 Noise Detection -- 6 Discussion -- 7 Conclusion -- References -- A Fast and Accurate Approach for Inferencing Social Relationships Among IoT Objects -- 1 Introduction -- 2 Problem Formulation and Basic Definitions -- 2.1 Basic Definitions -- 2.2 Problem Statement -- 3 SociRence: The Proposed Approach -- 4 Experiments -- 4.1 Datasets Description -- 4.2 Baselines -- 4.3 Performance Evaluation -- 4.4 Effect of "distance" and "duration" on the Social Structure -- 5 Related Works -- 6 Conclusion and Future Work -- References -- Graph Mining -- A Local Seeding Algorithm for Community Detection in Dynamic Networks -- 1 Introduction -- 2 Notations -- 3 Static Seeding by Local Strategy -- 3.1 Local Seeding Algorithm -- 3.2 Local Centrality Measuring -- 3.3 Hybrid Local Centrality Measuring -- 4</p>

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Graph Attention Network -- 4.3 Entity-Focused Attention Method -- 5 Experiments -- 5.1 Datasets -- 5.2 Data Preprocessing -- 5.3 Implementation Details -- 5.4 Quantitative Results -- 5.5 Ablation Studies -- 6 Conclusion -- References -- Linguistic Dependency Guided Graph Convolutional Networks for Named Entity Recognition -- 1 Introduction. 2 Related Work -- 3 Model -- 3.1 BiLSTM-CRF -- 3.2 GCN -- 3.3 SDP-BiLSTM-GCN-CRF -- 4 Experiment -- 4.1 Datasets -- 4.2 Experiment Setup -- 4.3 Results -- 5 Analysis -- 6 Conclusion -- References -- Multimedia and Time Series Data Mining -- CS-Siam: Siamese-Type Network Tracking Method with Added Cluster Segmentation -- 1 Introduction -- 2 Related Works -- 2.1 Siamese Network Based Trackers -- 2.2 Image Segmentation Based on Clustering -- 3 CS-Siam -- 3.1 Clustering Image Segmentation and Input -- 3.2 Siamese Network Structure -- 4 Experimental Results -- 4.1 Implementation Details -- 4.2 Dataset -- 4.3 Comparison Model -- 4.4 Evaluation Metrics -- 4.5 Result on OTB2015 -- 4.6 Result on VOT2018 -- 5 Conclusion -- References -- On Group Theory and Interpretable Time Series Primitives -- 1 Introduction -- 2 Preliminaries -- 3 Extracting Shapeoids in SAX -- 3.1 Lexical Shapeoids -- 4 Group Theory and Shapeoid Extraction -- 5 Conclusion and Discussion -- References -- Target Detection in Infrared Image of Transmission Line Based on Faster-RCNN -- 1 Introduction -- 2 Target Detection Algorithm Based on Infrared Image -- 2.1 Transmission Line Target Detection Algorithm -- 2.2 Faster-RCNN Structure Parameter Selection Optimization -- 3 Experiment -- 3.1 Dataset Establishment -- 3.2 Analysis of Results -- 3.3 Experiment -- 4 Conclusion -- References -- Automatic Quality Improvement of Data on the Evolution of 2D Regions -- 1 Introduction -- 2 Data Quality Improvement -- 2.1 Creating Quadtree-Based Time Series -- 2.2 Identifying and Removing Inconsistent Data -- 3 Experimental Evaluation -- 3.1 Datasets and Tools -- 3.2 Quadtree Generation -- 3.3 Building the Time Series -- 3.4 Consistent Data Selection -- 4 Related Work -- 5 Conclusions and Future Work -- References -- Cross-modal Data Linkage for Common Entity Identification -- 1 Introduction. 2 Related Work.

Sommario/riassunto

This book constitutes the proceedings of the 17th International Conference on Advanced Data Mining and Applications, ADMA 2021, held in Sydney, Australia in February 2022.* The 26 full papers presented together with 35 short papers were carefully reviewed and selected from 116 submissions. The papers were organized in topical sections in Part II named: Pattern mining; Graph mining; Text mining; Multimedia and time series data mining; and Classification, clustering and recommendation. * The conference was originally planned for December 2021, but was postponed to 2022.
