

1. Record Nr.	UNINA9910488712803321
Titolo	Data analysis and classification : methods and applications // edited by Krzysztof Jajuga, Krzysztof Najman, and Marek Walesiak
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	3-030-75190-2
Descrizione fisica	1 online resource (346 pages)
Collana	Studies in Classification, Data Analysis, and Knowledge Organization
Disciplina	330.015195
Soggetti	Economics - Statistical methods Statistics - Data processing Economia Estadística Processament de dades Congressos Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Contents -- About the Editors -- Methodology -- 1 Evaluation of Two-Step Spectral Clustering Algorithm for Large Untypical Data Sets -- Abstract -- 1 Introduction -- 2 Limitations of Large Data Sets Classification -- 3 Proposal of New Algorithm -- 4 Simulation Experiment Results -- 5 Final Remarks and Conclusions -- References -- 2 Determining the Number of Groups in Cluster Analysis Using Classical Indexes and Stability Measures-Comparison of Results -- Abstract -- 1 Introduction -- 2 Measures of Cluster Stability -- 2.1 Ben-Hur and Guyon Stability Measure -- 2.2 Brock, Pihur, Datta, and Datta Stability Measure -- 2.3 Fang and Wang Stability Measure -- 3 A Data Set and the Scheme of Research -- 4 Empirical Results -- 4.1 Results for the Social Domain -- 4.2 Results for the Economic Domain -- 4.3 Results for the Environmental Domain -- 4.4 Results for the Institutional and Political Domain -- 5 Conclusions -- References -- 3 Identification of the Words Most Frequently Used by Different Generations of Twitter Users -- Abstract -- 1 Theory of Generations --

2 Analysis of the Textual Data from the Social Network -- 2.1 Preparation of Text Data -- 2.2 Word Frequency Analysis -- 2.3 N-Gram Analysis -- 2.4 Agglomeration Methods of Hierarchical Clustering and Quality Assessment of Group Structure -- 3 Applications and Results -- 3.1 Twitter User Analysis -- 3.2 Analysis of the Words Occurring Most Commonly -- 3.3 Bigrams and Trigrams -- 4 Conclusion -- References -- 4 Classification Algorithms Applications for Information Security on the Internet: A Review -- Abstract -- 1 Introduction -- 2 Information Security -- 2.1 Cybersecurity Incidents Classification Taxonomy -- 2.2 Application on the Real Data -- 3 Methodology -- 4 Application of Classification Algorithms to Information Security -- 4.1 Popular Classification Algorithms. 4.2 Classification Algorithms Used Per Study -- 4.3 Cybersecurity Incidents Examined -- 4.4 Highly Cited Studies -- 4.5 Challenges in Classification Algorithms Application to the Information Security -- 5 Conclusions and Future Research Directions -- References -- 5 Outlier Detection with the Use of Isolation Forests -- Abstract -- 1 The Essence of Outliers in Cluster Analysis -- 2 Introduction to Isolation Forests and Extended Isolation Forests -- 3 The Impact of Algorithm Parameters on the method's Effectiveness -- 4 The Impact of Dataset Characteristics on the Anomaly Score Values -- 5 Discussion of the Empirical Research Results -- 6 Final Conclusions -- References -- Application in Finance -- 6 Propositions of Transformations of Asymmetrical Nominants into Stimulants on the Example of Chosen Financial Ratios -- Abstract -- 1 Introduction -- 2 Previous Proposition of Modification of Minimum and Maximum -- 3 Proposals of Nonlinear Transformation of Nominant into Stimulants Normalized in the Range [0 -- 1] -- 4 Data and Empirical Results -- 5 Conclusions -- References -- 7 Gini Regression in the Capital Investment Risk Assessment-Sensitivity Risk Measures in Portfolio Analysis -- Abstract -- 1 Introduction -- 2 Systematic Risk-Estimation Beta -- 3 Gini Regression-Multiple Regressions Model -- 4 Application of Gini Regression in Portfolio Analysis -- 5 Discussion and Conclusion -- References -- Application in Economics -- 8 Enterprise Dark Data -- Abstract -- 1 Introduction -- 2 Data Classification in Enterprises -- 2.1 Data Visibility -- 2.2 Data Quality -- 2.3 Data Availability -- 3 Dark Data Definitions-Literature Overview -- 4 Propositions and Results -- 4.1 Location of Dark Data in Enterprise -- 5 Conclusions -- References -- 9 The Significance of Medical Science Issues in Research Papers Published in the Field of Economics -- Abstract. 1 Introduction -- 2 Interaction of Economic and Medical Sciences -- 3 Description of Classifications -- 4 Research Methodology -- 4.1 Research Scope and Goals -- 4.2 Identification of Topics Occurring in Abstracts and Related to Main Subareas of Economics and Medical Science -- 4.3 Projection of Identified Topics into Main Concepts from JEL and MeSH Ontologies -- 4.4 Analysis of Relationships Between Concepts Related to Economics and Medical Science -- 5 The Analysis of the Contribution of Medical Science Issues in Research Papers Published in the Field of Economics -- 6 Conclusions -- Acknowledgements -- References -- 10 Application of Duration Analysis Methods in the Study of the Exit of a Real Estate Sale Offer from the Offer Database System -- Abstract -- 1 Introduction -- 2 Data Used in the Study -- 3 Time on the Market-Censored Data -- 4 Duration Analysis of the Real Estate Offer -- 5 Empirical Research -- 6 Conclusions -- References -- 11 Is Society Ready for Long-Term Investments?-Profiles of Electricity Users in Silesia -- Abstract -- 1 Introduction -- 2 Study of Energy Consumers' Behaviours and Their Impact on Shaping Pro-ecological Attitudes -- 3 Characteristics of the

Surveyed Electricity Users and Description of the Methods Applied in the Study -- 4 Results and Discussion -- 4.1 Characteristics of the Short-Term and Long-Term Investor Classes -- 4.2 Profiling of the Short-Term and Long-Term Investor Classes -- 5 Conclusions -- Acknowledgments -- References -- 12 The Use of the Spatial Taxonomic Measure of Development to Assess the Tourist Attractiveness of Districts of the Lesser Poland Province -- Abstract -- 1 Introduction -- 2 Methods -- 2.1 Linear Ordering -- 2.2 Hellwig's Method -- 2.3 Spatial Taxonomy Measure -- 3 Dataset and Results -- 3.1 Dataset -- 3.2 Empirical Study -- 4 Conclusions -- References. Application in Social Issues -- 13 Models of Competing Events in Assessing the Effects of the Transition of Unemployed People Between the States of Registration and De-Registration -- Abstract -- 1 Introduction -- 2 Literature Review -- 3 Research Methodology -- 4 Data Used in the Study -- 5 Empirical Results -- 6 Conclusions -- References -- 14 Direct Adjusted Survival Probabilities in the Analysis of Finding a Job by the Unemployed Depending on Their Individual Characteristics -- Abstract -- 1 Introduction -- 2 Research Method -- 3 Empirical Data and the Estimation of the Models -- 4 Conclusions -- References -- 15 Europe 2020 Strategy-Objective Evaluation of Realization and Subjective Assessment by Seniors as Beneficiaries of Social Assumptions -- Abstract -- 1 Introduction -- 2 Research Background and Literature Review -- 3 Data and Methods -- 4 Taxonomic Measure of Good Oldness -- 5 Europe 2020 Strategy in the Seniors' Opinion -- 6 Conclusions and Discussion -- References -- 16 Do Seniors Get to the Disco by Bike or in a Taxi?-Classification of Seniors According to Their Preferred Means of Transport -- Abstract -- 1 Introduction -- 2 Literature Review: Seniors and Their Transport Needs. Attempts at Segmentation -- 3 Methodology: Segmentations Rationale and Data Collection -- 3.1 Expert Segmentation -- 3.2 Segmentation Using Taxonomic Methodology -- 4 Results and Discussion -- 4.1 Main Findings of the Expert Segmentation -- 4.2 Main Findings of the Segmentation Using Taxonomic Methodology -- 4.3 Comparison of the Two Segmentations -- 5 Conclusions -- References -- Application with COVID-19 Data -- 17 The Impact of the COVID-19 Pandemic on the Economies of European Countries in the Period January-September 2020 Based on Economic Indicators -- Abstract -- 1 Introduction -- 2 SARS-CoV-2 and Economies -- 3 Literature Review -- 4 Economic Indicators. 5 Methodology -- 6 Economic Situation in European Countries and COVID-19 -- 6.1 First Quarter -- 6.2 Second Quarter -- 6.3 Third Quarter -- 6.4 January-September 2020 -- 7 Conclusions -- References -- 18 Modelling the Risk of Foreign Divestment in the Visegrad Group Countries During the COVID-19 Pandemic -- Abstract -- 1 Introduction -- 2 Review of Literature -- 3 Research Methodology -- 4 Results of Empirical Research -- 4.1 Modelling of the Risk of Insignificant Foreign Divestment -- 4.2 Modelling of the Risk of Moderate Foreign Divestment -- 4.3 Modelling of the Risk of Considerable Foreign Divestment -- 5 Conclusions -- Acknowledgements -- References -- 19 Analysis of COVID-19 Dynamics in EU Countries Using the Dynamic Time Warping Method and ARIMA Models -- Abstract -- 1 Introduction -- 2 Research Methodology -- 3 Empirical Data -- 4 The Results of the DTW Method -- 5 The Results of the ARIMA Modeling -- 6 Conclusions -- References.
