1. Record Nr. UNINA9910841872803321

Autore	Juarez Jose M
Titolo	Explainable Artificial Intelligence and Process Mining Applications for Healthcare : Third International Workshop, XAI-Healthcare 2023, and First International Workshop, PM4H 2023, Portoroz, Slovenia, June 15, 2023, Proceedings
Pubbl/distr/stampa	Cham : , : Springer, , 2024 ©2024
ISBN	3-031-54303-3
Edizione	[1st ed.]
Descrizione fisica	1 online resource (140 pages)
Collana	Communications in Computer and Information Science Series ; ; v.2020
Altri autori (Persone)	Fernandez-LlatasCarlos BielzaConcha JohnsonOwen KocbekPrimoz LarrañagaPedro MartinNiels Munoz-GamaJorge StiglicGregor SepulvedaMarcos
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Organization -- Contents -- International Workshop on Explainable Artificial Intelligence in Healthcare -- Unlocking the Power of Explainability in Ranking Systems: A Visual Analytics Approach with XAI Techniques -- 1 Introduction -- 2 Related Work -- 3 Methodology -- 3.1 XAI -- 3.2 Interactive Visualization -- 4 Case Study: Explaining Triaging Patients to Be Admitted to ICU -- 5 Discussion -- 6 Conclusion -- References -- Explainable Artificial Intelligence in Response to the Failures of Musculoskeletal Disorder Rehabilitation -- 1 Introduction -- 2 Background and Context of This Work -- 3 Complexity of the Generation of Self-recovery Exercises -- 3.1 Defining the Rules -- 3.2 Application of the Consensus Rules -- 4

General Structure of Recov'Up -- 5 Explicability -- 6 Data Extension and Perspectives -- References -- An Explainable AI Framework for Treatment Failure Model for Oncology Patients -- 1 Introduction -- 2 Scope of Work -- 2.1 Approaches to Explainability -- 3 Methodology -- 3.1 Treatment Failure Explanations -- 3.2 Model Level Explanations -- 3.3 Challenges and Limitations -- 4 Results and Discussion -- 4.1 Dataset Insights -- 4.2 Treatment Failure Explanations -- 4.3 Counterfactual -- 4.4 Model Level Explanations -- 5 Conclusion and Future Work -- References -- Feature Selection in Bipolar Disorder Episode Classification Using Cost-Constrained Methods -- 1 Introduction -- 2 Methodology -- 2.1 Data Preprocessing -- 2.2 Algorithm -- 3 Preliminary Results -- 4 Conclusions and Future Plans -- References -- ProbExplainer: A Library for Unified Explainability of Probabilistic Models and an Application in Interneuron Classification -- 1 Introduction -- 2 Background -- 2.1 Probabilistic Models: Bayesian Networks -- 2.2 Existing Software -- 2.3 Interneuron Classification: The Gardener Approach -- 3 Software Framework.
3.1 A Unified Interface -- 3.2 Design of the Algorithms -- 4 Application in GABAergic Interneuron Classification -- 4.1 Data -- 4.2 Experiments -- 4.3 Results -- 5 Conclusions and Future Work -- References -- Interpreting Machine Learning Models for Survival Analysis: A Study of Cutaneous Melanoma Using the SEER Database -- 1 Introduction -- 2 Surveillance, Epidemiology, and End Results Database -- 2.1 Selection of the Individuals -- 2.2 Exploratory Data Analysis -- 3 Machine Learning Models -- 3.1 Data Preprocessing -- 3.2 Machine Learning Models -- 4 Explainability -- 5 Conclusions -- References -- Explanations of Symbolic Reasoning to Effect Patient Persuasion and Education -- 1 Introduction -- 2 Derivation Proofs -- 3 Human-Readable Explanation Generation from Derivation Proofs -- 3.1 Pre-processing Module -- 3.2 Describe Module -- 3.3 Collect Module -- 4 Demonstration -- 5 Planned Evaluation -- 6 Conclusions and Future Work -- References -- International Workshop on Process Mining Applications for Healthcare -- PMApp: An Interactive Process Mining Toolkit for Building Healthcare Dashboards -- 1 Introduction -- 2 Through an Interactive Process Mining Solution for Healthcare -- 3 PMApp: An Interactive Process Mining Toolkit -- 3.1 Experiment Designer -- 3.2 Ingestor Editor -- 3.3 Dashboard -- 4 Discussion and Conclusions -- References -- A Data-Driven Framework for Improving Clinical Managements of Severe Paralytic Ileus in ICU: From Path Discovery, Model Generation to Validation -- 1 Introduction -- 2 Method -- 2.1 Data Resource -- 2.2 Cohort Extraction -- 2.3 Event Log Extraction -- 2.4 Frequent Patient Pathways Discovery -- 2.5 Structural Equation Modelling -- 3 Results -- 4 Discussion and Conclusion -- References -- Phenotypes vs Processes: Understanding the Progression of Complications in Type 2 Diabetes. A Case Study -- 1 Introduction.
2 Methodology -- 2.1 Data Collection and Study Measures -- 2.2 Methods -- 2.3 Data Corpus and Event Log Generation -- 3 Results -- 3.1 Patient-Level Analysis -- 3.2 Short-Term Pathways Analysis -- 4 Discussion -- References -- From Script to Application. A bupaR Integration into PMApp for Interactive Process Mining Research -- 1 Introduction -- 2 Background -- 3 Use Case and Test Scenario -- 3.1 Filtering Cases Based on Activities and Timestamps -- 3.2 Data Augmentation and Conditional Filtering -- 3.3 Manipulation of Activities -- 4 Discussion and Future Work -- References -- Understanding Prostate Cancer Care Process Using Process Mining: A Case Study -- 1 Introduction -- 2 Materials and Methods -- 3 Results -- 4 Discussion and Conclusions -- References -- Author Index.