



## IFCS 2024 Accepted Contributions - Preliminary Program

| Author's Name             | Paper or Abstract Title                                                                                                                               | University                                | Country       | Preliminary Schedule                                                                      |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------|-------------------------------------------------------------------------------------------|
| Adhikari, Sourav          | Combining Topic Modeling and Word Embedding to Predict Match Outcomes in Association Football                                                         | University of Vienna                      | Austria       | Thursday 18, 16:40-17:00, Room 1, session: Data Mining                                    |
| Aguilera, Ana M           | Classification of neuroscientific data under the probabilistic principles of near-perfect classification                                              | Universidad de Granada                    | Spain         | Thursday 18, 09:10-09:30, Room 3, session: Functional Data Analysis                       |
| Anderlucci Laura          | Randomly perturbed random forests                                                                                                                     | University of Bologna                     | Italy         | Tuesday 16, 14:50-15:10, Room 1, session: Clustering, Classification and Discrimination 3 |
| Anton Cristina Adela      | A multivariate functional data clustering method using parsimonious cluster weighted models                                                           | MacEwan Univeristy                        | Canada        | Thursday 18, 09:10-09:30, Room 1, session: Model-Based Clustering 1                       |
| Arce, Jorge               | Principal Components Analysis of Histogram-valued Data: Set Theory Approach                                                                           | Universidad Nacional de Costa Rica        | Costa Rica    | Tuesday 16, 10:10-10:30, Room 2, session: Symbolic Data Analysis 2                        |
| Arroyo-Castro Jose Pablo: | Unsupervised Detection of Anomaly in Public Procurement Processes                                                                                     |                                           | Costa Rica    | Pending                                                                                   |
| Asse Amiga, José          | Pattern Recognition for Mexican Household Power Demand Time Series                                                                                    | Universidad Iberoamericana                | Mexico        | Monday 15, 16:40-16:40, Room 2, session: Time Series Analysis and Pattern Recognition     |
| Bakk, Zsuzsa              | Unravelling the Skill Sets of Data Scientists: A Text Mining Analysis of Dutch University Master Programs in Data Science and Artificial Intelligence | Leiden University                         | Netherlands   | Wednesday 17, 14:40-15:00, Room 2, session: Data Science 1                                |
| Balzanella, Antonio       | A Robust approach of the Clusterwise Regression method for distributional data                                                                        | University of Campania "Luigi Vanvitelli" | Italy         | Tuesday 16, 10:30-10:50, Room 2, session: Symbolic Data Analysis 2                        |
| Banks, David              | Statistics in the Knowledge Economy                                                                                                                   | Duke University                           | United States | Monday 15, 16:40-17:00, Room 1, session: Advances in supervised classification            |
| Batagelj, Vladimir        | Network analysis approach to the analysis of event sequences                                                                                          | University of Ljubljana                   | Slovenia      | Pending                                                                                   |
| Beaudry, Éric             | Towards Topologically Diverse Probabilistic Planning Benchmarks: Synthetic Domain Generation for Markov Decision Processes                            | Université du Québec à Montréal           | Canada        | Thursday 18, 09:50-10:10, Room 3, session: Machine Learning                               |
| Billard, Lynne            | Distributional-based Partitioning with Copulas                                                                                                        | University of Georgia                     | United States | Tuesday 16, 08:30-08:50, Room 2, session: Symbolic Data Analysis 1                        |
| Boj, Eva                  | Robust distance-based generalized linear models: A new tool for classification                                                                        | Universitat de Barcelona                  | Spain         | Tuesday 16, 17:00-17:20, Room 1, session: Classification Methods for Large Datasets       |
| Bomze, Immanuel M         | Scalable conic optimization for feature selection in linear SVMs with cardinality control                                                             | University of Vienna                      | Austria       | Monday 15, 17:00-17:20, Room 1, session: Advances in supervised classification            |
| Borrata, Gianmarco        | A Robust approach of the Clusterwise Regression method for distributional data                                                                        | University of Naples Federico II          | Italy         | Tuesday 16, 10:30-10:50, Room 2, session: Symbolic Data Analysis 2                        |

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| Bouranta, Vasiliki              | Candidates, Parties, Issues and the Political Marketing Strategies: A Comparative Analysis on political competition in Greece          | Aristototle University of Thessaloniki                 | Greece         | Wednesday 17, 08:50-09:10, Room 2, session: Data Science 1                                                         |
| Brito, Paula                    | Quality Measures for Clusterwise Regression                                                                                            | University of Porto                                    | Portugal       | Tuesday 16, 14:30-14:50, Room 2, session: Symbolic Data Analysis 3                                                 |
| Buendía, Débora                 | Spatial Agent-Based Model for Aedes Aegypti mosquitoes in the urban area in Arica (Chile)                                              | Universidad de Valparaíso                              | Chile          | Tuesday 16, 17:40-18:00, Room 2, session: Applications                                                             |
| Cariou, Véronique               | Two clustering strategies for structural composite models with PLS-SEM                                                                 | StatSC unit ONIRIS VetAgroBio Nantes                   | France         | Tuesday 16, 14:30-14:50, Room 1, session: Clustering, Classification and Discrimination 3                          |
| Cavicchia, Carlo                | Nearest neighbors for mixed type data: an inter-dependency based approach                                                              | Erasmus University Rotterdam                           | Netherlands    | Monday 15, 16:40-17:00, Room 3, session: Multidimensional data visualization or Image Analysis and Computer Vision |
| Cervantes Artavia, Joshua Isaac | Predicting Air Pollution in Beijing, China Using Chemical, and Climate Variables                                                       | Universidad de Costa Rica                              | Costa Rica     | Monday 15, 16:20-16:40, Room 2, session: Time Series Analysis and Pattern Recognition                              |
| Chadjipadelis, Theodore         | Candidates, Parties, Issues and the Political Marketing Strategies: A Comparative Analysis on political competition in Greece          | Aristotle University of Thessaloniki                   | Greece         | Wednesday 17, 08:50-09:10, Room 2, session: Data Science 1                                                         |
| Chadjipadelis, Theodore         | Mapping Electoral Behavior and Political Competition: A Comparative Analytical Framework for Voter Typologies and Political Discourses | Aristotle University of Thessaloniki                   | Greece         | Wednesday 17, 08:30-08:50, Room 2, session: Data Science 1                                                         |
| Champagne Gareau, Jaël          | Towards Topologically Diverse Probabilistic Planning Benchmarks: Synthetic Domain Generation for Markov Decision Processes             | Université du Québec à Montréal                        | Canada         | Thursday 18, 09:50-10:10, Room 3, session: Machine Learning                                                        |
| Chaparala Pushya                | Symbolic Data Analysis Framework for Recommendation Systems: SDA-RecSys                                                                | Vignan's Foundation for Science, Technology & Research | India          | Tuesday 16, 09:10-09:10, Room 2, session: Symbolic Data Analysis 1                                                 |
| Colak, Caner                    | Green bond yield determination with the use of machine learning methods. Comparison with conventional bonds                            | Wroclaw University of Economics and Business           | Poland         | Pending                                                                                                            |
| Collao, Ximena                  | Spatial Agent-Based Model for Aedes Aegypti mosquitoes in the urban area in Arica (Chile)                                              | Universidad de Valparaíso                              | Chile          | Tuesday 16, 17:40-18:00, Room 2, session: Applications                                                             |
| Corrales Barquero, Ricardo      | Gender Bias Mitigation in a Credit Scoring Model                                                                                       | Universidad de Costa Rica                              | Costa Rica     | Wednesday 17, 09:10-09:30, Room 2, session: Data Science 1                                                         |
| Costa, Efthymios                | A Deterministic Information Bottleneck Method for Clustering Mixed-Type Data                                                           | Imperial College London                                | United Kingdom | Tuesday 16, 08:30-08:50, Room 1, session: Clustering, Classification and Discrimination 1                          |
| Cuevas Covarrubias, Carlos      | Crime in Mexico: an original Data Analysisapproach                                                                                     | Universidad Anáhuac                                    | Mexico         | Wednesday 17, 14:00-14:20, Room 2, session: Data Science 1                                                         |

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| D' Enza, Alfonso Iodice         | Nearest neighbors for mixed type data: an inter-dependency based approach                                   | University of Naples Federico II              | Italy         | Monday 15, 16:40-17:00, Room 3, session: Multidimensional data visualization or Image Analysis and Computer Vision |
| D' Onofrio, Federico            | Scalable conic optimization for feature selection in linear SVMs with cardinality control                   | Sapienza Univ. di Roma                        | Italy         | Monday 15, 17:00-17:20, Room 1, session: Advances in supervised classification                                     |
| Dang, Utkarsh                   | Gaussian mixture models for changepoint detection                                                           | Carleton University                           | Canada        | Pending                                                                                                            |
| De Carvalho, Francisco de A. T. | A Robust approach of the Clusterwise Regression method for distributional data                              | University of Pernambuco - CIN                | Brazil        | Tuesday 16, 10:30-10:50, Room 2, session: Symbolic Data Analysis 2                                                 |
| De Rooij, Mark                  | Reduced Rank Regression with Mixed Predictors and Mixed Responses                                           | Leiden University                             | Netherlands   | Monday 15, 16:00-16:20, Room 3, session: Visualization                                                             |
| De Roover, Kim                  | Mixture Multigroup Structural Equation Modeling: Comparing Structural Relations Across Many Groups          | KU Leuven                                     | Belgium       | Thursday 18, 08:30-08:50, Room 1, session: Model-Based Clustering 1                                                |
| Emilion, Richard                | Expected Size of Random Fuzzy Concep Lattices                                                               | Denis Poisson Institute University of Orleans | France        | (Remote)                                                                                                           |
| Falih, Issam                    | Multimodal Emotion Recognition: A comparative study                                                         | LIMOS, Clermont Auvergne University           | France        | Tuesday 16, 09:50-10:10, Room 1, session: Clustering, Classification and Discrimination 2                          |
| Ferligoj, Anuška                | Network analysis approach to the analysis of event sequences                                                | University of Ljubljana                       | Slovenia      | Pending                                                                                                            |
| France, Stephen L.              | Visualization and Clustering with Projective Techniques                                                     | Mississippi State University                  | United States | Thursday 18, 16:20-16:40, Room 1, session: Data Mining                                                             |
| Franczak, Brian                 | Classifying multivariate observations in data sets with asymmetric features and outlying observations       | MacEwan University                            | Canada        | Thursday 18, 16:20-16:40, Room 2, session: Modeling Multivariate Data                                              |
| Franses, Philip Hans            | Spatio-temporal hierarchical clustering of interval time series with application to suicide rates in Europe | Erasmus University of Rotterdam               | Netherlands   | Tuesday 16, 09:50-10:10, Room 2, session: Symbolic Data Analysis 2                                                 |
| Ghazalli, Nadia                 | Machine Learning-Based Classification and Prediction to Assess Corrosion Degradation in Mining Pipelines    | University of Quebec at Trois Rivières        | Canada        | Monday 15, 18:00-18:20, Room 2, session: Optimization in Classification and Clustering                             |
| Goblet, Xavier                  | Multimodal Emotion Recognition: A comparative study                                                         | LIMOS, Clermont Auvergne University           | France        | Tuesday 16, 09:50-10:10, Room 1, session: Clustering, Classification and Discrimination 2                          |
| Gondech, Ayemn                  | Multimodal Emotion Recognition: A comparative study                                                         | LIMOS, Clermont Auvergne University           | France        | Tuesday 16, 09:50-10:10, Room 1, session: Clustering, Classification and Discrimination 2                          |
| González Barquero, Pilar        | High-dimensional survival analysis: exploring Cox regression with lasso and adaptive lasso penalties        | University Carlos III of Madrid               | Spain         | Tuesday 16, 17:20-17:40, Room 1, session: Classification Methods for Large Datasets                                |
| Górecki, Tomasz                 | Applying classification methods for multivariate functional data                                            | Adam Mickiewicz University                    | Poland        | Thursday 18, 08:30-08:50, Room 3, session: Functional Data Analysis                                                |

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| Grané, Aurea                       | A new distance for categorical data with moderate association                                                                                                              | Universidad Carlos III de Madrid | Spain          | Wednesday 17, 08:30-08:50, Room 1, session: Clustering, Classification and Discrimination 5                              |
| Grané, Aurea                       | Robust distance-based generalized linear models: A new tool for classification                                                                                             | Universidad Carlos III de Madrid | Spain          | Tuesday 16, 17:00-17:20, Room 1, session: Classification Methods for Large Datasets                                      |
| Guerra Urzola, Rosember Isidoro    | Optimal penalized sparse PCA                                                                                                                                               | Tilburg University               | Netherlands    | Monday 15, 17:40-17:40, Room 1, session: Dimension Reduction                                                             |
| Guerra, María Elizabeth            | Spatial Agent-Based Model for Aedes Aegypti mosquitoes in the urban area in Arica (Chile)                                                                                  |                                  | Chile          | Tuesday 16, 17:40-18:00, Room 2, session: Aplications                                                                    |
| Guerrero San Vicente, María Teresa | Crime in Mexico: an original Data Analysisapproach                                                                                                                         | Universidad Anáhuac              | Mexico         | Wednesday 17, 14:00-14:20, Room 2, session: Data Science 1                                                               |
| Guevara Villalobos, Álvaro         | Improving Employee Attrition with Data Analysis and Machine Learning                                                                                                       | Universidad de Costa Rica        | Costa Rica     | Thursday 18, 10:30-10:50, Room 3, session: Machine Learning                                                              |
| Guevara Villalobos, Álvaro         | Innovating the banking with machine learning: Credit Score for MSMEs                                                                                                       | Universidad de Costa Rica        | Costa Rica     | Thursday 18, 10:10-10:30, Room 2, session: Generative Artificial Intelligence, Explainable Artificial Intelligence (XAI) |
| Harrison, Andrew                   | A Gene Selection Method for Classification with Three Classes Using Proportional Overlapping Scores                                                                        | University of Essex              | United Kingdom | Monday 15, 16:00-16:20, Room 1, session: Advances in supervised classification                                           |
| Hernández, Alberto                 | UMAP projections and the survival of empty space: A geometric approach to high-dimensional data                                                                            | Universidad de Costa Rica        | Costa Rica     | Monday 15, 17:40-18:00, Room 3, session: Big Data and High-Dimensional                                                   |
| Infante, Gabriele                  | A new distance for categorical data with moderate association                                                                                                              | University of Milan              | Italy          | Wednesday 17, 08:30-08:50, Room 1, session: Clustering, Classification and Discrimination 5                              |
| Kaczmarczyk, Klaudia               | Green bond yield determination with the use of machine learning methods. Comparison with conventional bonds                                                                | Wroclaw University               | Poland         | Pending                                                                                                                  |
| Khismatulina, Marina               | Multivariate clustering of nonparametric time trends                                                                                                                       | Erasmus University Rotterdam     | Netherlands    | Monday 15, 16:40-17:00, Room 2, session: Time Series Analysis and Pattern Recognition                                    |
| Kral, Caitlin                      | Model-based bi-clustering using multivariate Poisson-lognormal with general block-diagonal covariance matrix and its applications Submitted to IFCS 2024 Book of Abstracts | Carleton University              | Canada         | Tuesday 16, 08:50-09:10, Room 1, session: Clustering, Classification and Discrimination 1                                |
| Krzyśko, Mirosław                  | Applying classification methods for multivariate functional data                                                                                                           | University of Kalisz             | Poland         | Pending                                                                                                                  |
| Kuziak, Katarzyna Ewa              | Green bond yield determination with the use of machine learning methods. Comparison with conventional bonds                                                                | Wroclaw University               | Poland         | Pending                                                                                                                  |

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| Labioud, Lazhar      | Fuzzy Clustering of Attributed Networks                                                                                                                    | Université Paris Cité                  | France         | Wednesday 17, 14:40-15:00, Room 1, session: Clustering, Classification and Discrimination 6                        |
| Lausen, Berthold     | PASTE-Boost: P-Value Adjusted Selected Tree Ensembles with Gradient Boosted Improvements                                                                   | University of Essex                    | United Kingdom | Tuesday 16, 10:10-10:30, Room 1, session: Clustering, Classification and Discrimination 2                          |
| Lausen, Berthold     | P-value Adjusted Selected Tree Ensemble                                                                                                                    | University of Essex                    | United Kingdom | Pending                                                                                                            |
| Le, Thu Tra          | Multiblock Regularized Least-squares Latent Variable Method                                                                                                | Tilburg University                     | Netherlands    | Monday 15, 17:40-17:40, Room 1, session: Dimension Reduction                                                       |
| Leman, Marc          | Classification of neuroscientific data under the probabilistic principles of near-perfect classification                                                   | IPEM, Universiteit Gent                | Belgium        | Thursday 18, 09:10-09:30, Room 3, session: Functional Data Analysis                                                |
| Lever, Scarlett      | Spatial Agent-Based Model for Aedes Aegypti mosquitoes in the urban area in Arica (Chile)                                                                  | Universidad de Valparaíso              | Chile          | Tuesday 16, 17:40-18:00, Room 2, session: Applications                                                             |
| Lopes, Marta B       | Understanding omics links behind glioma heterogeneity: a network and clustering approach                                                                   | NOVA School of Science and Technology  | Portugal       | Monday 15, 18:00-18:20, Room 3, session: Big Data and High-Dimensional                                             |
| Mahmoud, Osama       | A Gene Selection Method for Classification with Three Classes Using Proportional Overlapping Scores                                                        | University of Essex                    | United Kingdom | Monday 15, 16:00-16:20, Room 1, session: Advances in supervised classification                                     |
| Mahmoud, Osama       | PASTE-Boost: P-Value Adjusted Selected Tree Ensembles with Gradient Boosted Improvements                                                                   | University of Essex                    | United Kingdom | Tuesday 16, 10:10-10:30, Room 1, session: Clustering, Classification and Discrimination 2                          |
| Mahmoud, Osama       | P-value Adjusted Selected Tree Ensemble                                                                                                                    | University of Essex                    | United Kingdom | Pending                                                                                                            |
| Makarenkov, Vladimir | Towards Topologically Diverse Probabilistic Planning Benchmarks: Synthetic Domain Generation for Markov Decision Processes                                 | Université du Québec à Montréal        | Canada         | Thursday 18, 09:50-10:10, Room 3, session: Machine Learning                                                        |
| Malecka, Marta       | Robust estimation of the range-based GARCH model: Forecasting volatility, value at risk and expected shortfall of cryptocurrencies                         | University of Lodz                     | Poland         | Thursday 18, 08:50-09:10, Room 2, session: Data Science 2                                                          |
| Manning, Samantha    | Clustering for High-Dimensional, Nested Data with Categorical Outcomes Using a Generalized Linear Mixed Effects Model with Simultaneous Variable Selection | University of Rochester Medical Center | United States  | Tuesday 16, 09:10-09:30, Room 1, session: Clustering, Classification and Discrimination 1                          |
| Markos, Angelos      | A Deterministic Information Bottleneck Method for Clustering Mixed-Type Data                                                                               | Democritus University of Thrace        | Greece         | Tuesday 16, 08:30-08:50, Room 1, session: Clustering, Classification and Discrimination 1                          |
| Markos, Angelos      | Nearest neighbors for mixed type data: an inter-dependency based approach                                                                                  | Democritus University of Thrace        | Greece         | Monday 15, 16:40-17:00, Room 3, session: Multidimensional data visualization or Image Analysis and Computer Vision |

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| Martin Fernández, José Antonio | Unsupervised methods for the creation of orthonormal bases in compositional data: R-mode clustering         | Universitat de Girona                                     | Spain         | Wednesday 17, 08:50-09:10, Room 1, session: Clustering, Classification and Discrimination 5 |
| Martínez Ruiz, Alba            | Multiblock Methods for Learning Structural Equation Models: An Overview                                     | Universidad Diego Portales                                | Chile         | Thursday 18, 16:00-16:20, Room 2, session: Modeling Multivariate Data                       |
| Martínez, Diana Marcela        | Spatial Agent-Based Model for Aedes Aegypti mosquitoes in the urban area in Arica (Chile)                   | Universidad de Valparaíso                                 | Chile         | Tuesday 16, 17:40-18:00, Room 2, session: Applications                                      |
| Martínez, Kerlyns              | Spatial Agent-Based Model for Aedes Aegypti mosquitoes in the urban area in Arica (Chile)                   | Universidad de Valparaíso                                 | Chile         | Tuesday 16, 17:40-18:00, Room 2, session: Applications                                      |
| Mattera, Raffaele              | Spatio-temporal hierarchical clustering of interval time series with application to suicide rates in Europe | Sapienza University of Rome                               | Italy         | Tuesday 16, 09:50-10:10, Room 2, session: Symbolic Data Analysis 2                          |
| Mayo-Íscar, Agustín            | Robust distance-based generalized linear models: A new tool for classification                              | Universidad de Valladolid                                 | Spain         | Tuesday 16, 17:00-17:20, Room 1, session: Classification Methods for Large Datasets         |
| Medl, Matthias                 | Optimization Strategies for Bioprocess Parameterization: A Comparative Evaluation                           | University of Natural Resources and Life Sciences Vienna  | Austria       | Tuesday 16, 17:20-17:40, Room 2, session: Applications                                      |
| Mendez Civieta, Alvaro         | A quantile extension to functional PCA                                                                      | Columbia University                                       | Spain         | Thursday 18, 08:50-09:10, Room 3, session: Functional Data Analysis                         |
| Mephu Nguifo, Engelbert        | Bridge the gap between Gradual Patterns and Statistical Correlations                                        | LIMOS, Clermont Auvergne University                       | France        | Thursday 18, 16:00-16:20, Room 1, session: Data Mining                                      |
| Mephu Nguifo, Engelbert        | Multimodal Emotion Recognition: A comparative study                                                         | LIMOS, Clermont Auvergne University                       | France        | Tuesday 16, 09:50-10:10, Room 1, session: Clustering, Classification and Discrimination 2   |
| Monge Cordero, Moisés De Jesús | Predicting Air Pollution in Beijing, China Using Chemical, and Climate Variables                            | Universidad de Costa Rica                                 | Costa Rica    | Monday 15, 16:20-16:40, Room 2, session: Time Series Analysis and Pattern Recognition       |
| Montanari, Angela              | Randomly Perturbed Random Forests                                                                           | University of Bologna                                     | Italy         | Tuesday 16, 14:50-15:10, Room 1, session: Clustering, Classification and Discrimination 3   |
| Montes, Fernando               | Hypothesis Testing of Mean Interval for p-dimensional Interval-valued Data                                  | The University of Texas at San Antonio                    | United States | Pending                                                                                     |
| Morala, Pablo                  | Using polynomials to explain classification outputs from neural networks                                    | Universidad Carlos III de Madrid                          | Spain         | Tuesday 16, 17:40-18:00, Room 1, session: Classification Methods for Large Datasets         |
| Moussa Sow, Kalidou            | Machine Learning-Based Classification and Prediction to Assess Corrosion Degradation in Mining Pipelines    | University of Quebec at Trois Rivières                    | Canada        | Monday 15, 18:00-18:20, Room 2, session: Optimization in Classification and Clustering      |
| Nadif, Mahamed                 | Fuzzy Clustering of Attributed Networks                                                                     | Université Paris Cité                                     | France        | Wednesday 17, 14:40-15:00, Room 1, session: Clustering, Classification and Discrimination 6 |
| Nagabhushan, P                 | Symbolic Data Analysis Framework for Recommendation Systems: SDA-RecSys                                     | Vignan's Foundation for Science, Technology, and Research | India         | Pending                                                                                     |

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| Nakayama, Atsuhō         | Integration of Deep Learning and Marketing Research for Brand Confusion Prediction and Visual ad Analysis                                                                 | Tokyo Metropolitan University                          | Japan                   | Monday 15, 17:00-17:20, Room 3, session: Multidimensional data visualization or Image Analysis and Computer Vision |
| Niang, Ndéye             | Weighted Consensus Clustering for Unbiased Feature Importance in Random Forests                                                                                           | CEDRIC-CNAM                                            | France                  | Tuesday 16, 15:10-15:30, Room 1, session: Clustering, Classification and Discrimination 3                          |
| Noel, Cédric             | Finite Mixture Models for an underlying Beta distribution with an application to COVID-19 data                                                                            | University of Lorraine                                 | France                  | Thursday 18, 08:50-09:10, Room 1, session: Model-Based Clustering 1                                                |
| Nordmark, Henrik         | P-value Adjusted Selected Tree Ensemble                                                                                                                                   | Victoria                                               | Canada                  | Pending                                                                                                            |
| Nuñez Corrales, Santiago | Machine learning-driven COVID-19 early triage and large-scale testing strategies based on the 2021 Costa Rican Actualidades survey                                        | University of Illinois Urbana-Champaign                | United States           | Pending                                                                                                            |
| Nuñez, Manuel            | On the Vapnik-Chervonenkis Dimension and Learnability of the Hurwicz Decision Criterion                                                                                   | University of Connecticut                              | United States           | Thursday 18, 08:30-08:50, Room 2, session: Data Science 2                                                          |
| Ortega Menjivar, Lena    | A toolbox for clustering ordinal data in the presence of missing values                                                                                                   | BOKU University of Natural Resources and Life Sciences | Austria                 | Tuesday 16, 10:30-10:50, Room 1, session: Clustering, Classification and Discrimination 2                          |
| Ortego, María Isabel     | Analysis of seawater nutrient concentrations to assess Submarine Groundwater Discharge along the Catalan coast (NW Mediterranean): a Compositional Data Analysis Approach | Universitat Politècnica de Catalunya-BarcelonaTECH     | Spain                   | Wednesday 17, 14:20-14:40, Room 1, session: Clustering, Classification and Discrimination 6                        |
| Palagi, Laura            | Scalable conic optimization for feature selection in linear SVMs with cardinality control                                                                                 | Sapienza Univ. di Roma                                 | Italy                   | Monday 15, 17:00-17:20, Room 1, session: Advances in supervised classification                                     |
| Pan, Wenhao              | Distributional-based Partitioning with Copulas                                                                                                                            | University of Washington                               | United States           | Tuesday 16, 08:30-08:50, Room 2, session: Symbolic Data Analysis 1                                                 |
| Panagiotidou, Georgia    | Candidates, Parties, Issues and the Political Marketing Strategies: A Comparative Analysis on political competition in Greece                                             | Aristotle University of Thessaloniki                   | Greece                  | Wednesday 17, 08:50-09:10, Room 2, session: Data Science 1                                                         |
| Panagiotidou, Georgia    | Mapping Electoral Behavior and Political Competition: A Comparative Analytical Framework for Voter Typologies and Political Discourses                                    | Aristotle University of Thessaloniki                   | Greece                  | Wednesday 17, 08:30-08:50, Room 2, session: Data Science 1                                                         |
| Papatsouma, Ioanna       | A Deterministic Information Bottleneck Method for Clustering Mixed-Type Data                                                                                              | Imperial College London                                | Imperial College London | Tuesday 16, 08:30-08:50, Room 1, session: Clustering, Classification and Discrimination 1                          |
| Pasquier, Carlos         | Machine learning-driven COVID-19 early triage and large-scale testing strategies based on the 2021 Costa Rican Actualidades survey                                        | Universidad de Costa Rica                              | Costa Rica              | Pending                                                                                                            |

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| Peng, Bo                                        | Scalable conic optimization for feature selection in linear SVMs with cardinality control                                                              | University of Vienna                                            | Austria        | Monday 15, 17:00-17:20, Room 1, session: Advances in supervised classification                                           |
| Perez Alonso, Andres Felipe                     | Mixture Multigroup Structural Equation Modeling: Comparing Structural Relations Across Many Groups                                                     | Tilburg University                                              | Netherlands    | Thursday 18, 08:30-08:50, Room 1, session: Model-Based Clustering 1                                                      |
| Pietrzyk, Radosław                              | A Spectral Approach to Evaluating VaR Forecasts: Stock Market Evidence from the Subprime Mortgage Crisis, through COVID-19, to the Russo-Ukrainian War | Wroclaw Univeristy                                              | Poland         | Thursday 18, 09:10-09:30, Room 2, session: Data Science 2                                                                |
| Pooley, Joshua                                  | PASTE-Boost: P-Value Adjusted Selected Tree Ensembles with Gradient Boosted Improvements                                                               | University of Essex                                             | United Kingdom | Tuesday 16, 10:10-10:30, Room 1, session: Clustering, Classification and Discrimination 2                                |
| Pooley, Joshua                                  | P-value Adjusted Selected Tree Ensemble                                                                                                                | University of Essex                                             | United Kingdom | Pending                                                                                                                  |
| Pulido, Belén                                   | A multivariate approach for clustering functional data in one and multiple dimensions                                                                  | Universidad Carlos III de Madrid                                | Spain          | Wednesday 17, 14:00-14:20, Room 1, session: Clustering, Classification and Discrimination 6                              |
| Qin, Xiaoke                                     | Clustering of human gut microbiome data using the finite mixture of generalized Dirichlet-multinomial models                                           | Carleton University                                             | Canada         | Thursday 18, 09:50-10:10, Room 1, session: Model-Based Clustering 2                                                      |
| Quirós Muñoz, Tatiana                           | Innovating the banking with machine learning: Credit Score for MSMEs                                                                                   | Universidad de Costa Rica                                       | Costa Rica     | Thursday 18, 10:10-10:30, Room 2, session: Generative Artificial Intelligence, Explainable Artificial Intelligence (XAI) |
| Ramirez Rodriguez, Sergio                       | Improving Employee Attrition with Data Analysis and Machine Learning                                                                                   | University of Costa Rica                                        | Costa Rica     | Thursday 18, 10:30-10:50, Room 3, session: Machine Learning                                                              |
| Riccio, Donato; Fabrizio Maturo & Elvira Romano | Improving Functional Classification Performance through Diversity: The Functional Voting Approach                                                      | University of Campania Luigi Vanvitelli; Universitas Mercatorum | Italy          | Tuesday 16, 15:10-15:30, Room 2, session: Symbolic Data Analysis 3                                                       |
| Rodriguez Rojas, Oldemar                        | Riemannian Statistics for Any Type of Data                                                                                                             | University of Costa Rica                                        | Costa Rica     | Wednesday 17, 14:20-14:40, Room 2, session: Data Science 1                                                               |
| Rosseel, Yves                                   | Mixture Multigroup Structural Equation Modeling: Comparing Structural Relations Across Many Groups                                                     | Ghent University                                                | Belgium        | Thursday 18, 08:30-08:50, Room 1, session: Model-Based Clustering 1                                                      |
| Roy, Anuradha                                   | Hypothesis Testing of Mean Interval for p-dimensional Interval-valued Data                                                                             | The University of Texas at San Antonio                          | United States  | Pending                                                                                                                  |
| Sabater Gúzman, Daniel Josué                    | Predicting Air Pollution in Beijing, China Using Chemical, and Climate Variables                                                                       | Universidad de Costa Rica                                       | Costa Rica     | Monday 15, 16:20-16:40, Room 2, session: Time Series Analysis and Pattern Recognition                                    |
| Sajobi, Tolulope                                | A comparison of multivariate mixed models and generalized estimation equations models for discrimination in multivariate longitudinal data             | University of Calgary                                           | Canada         | Monday 15, 16:20-16:40, Room 1, session: Advances in supervised classification                                           |

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| Salas, Rodrigo    | Spatial Agent-Based Model for Aedes Aegypti mosquitoes in the urban area in Arica (Chile)                                                                                                               | Universidad de Valparaíso                              | Chile          | Tuesday 16, 17:40-18:00, Room 2, session: Applications                                      |
| Salini, Silvia    | A new distance for categorical data with moderate association                                                                                                                                           | University of Milan                                    | Italy          | Wednesday 17, 08:30-08:50, Room 1, session: Clustering, Classification and Discrimination 5 |
| Salnikov Daniel   | Modelling clusters in network time series with an application to presidential elections in the USA                                                                                                      |                                                        | Canada         | Monday 15, 16:00-16:20, Room 2, session: Time Series Analysis and Pattern Recognition       |
| Same, Allou       | Drift-switching local level models for time series segmentation                                                                                                                                         | Université Gustave Eiffel                              | France         | Thursday 18, 10:30-10:50, Room 1, session: Model-Based Clustering 2                         |
| Scharl, Theresa   | A Clustering Procedure for Three-Way RNA Sequencing Data Using Data Transformations and Matrix-Variate Gaussian Mixture Models                                                                          | BOKU University of Natural Resources and Life Sciences | Austria        | Thursday 18, 10:10-10:30, Room 1, session: Model-Based Clustering 2                         |
| Schiltz, Jang     | Finite Mixture Models for an underlying Beta distribution with an application to COVID-19 data                                                                                                          | University of Luxembourg                               | Luxembourg     | Thursday 18, 08:50-09:10, Room 1, session: Model-Based Clustering 1                         |
| Schneider, Mark   | On the Vapnik-Chervonenkis Dimension and Learnability of the Hurwicz Decision Criterion                                                                                                                 | University of Alabama                                  | United States  | Thursday 18, 08:30-08:50, Room 2, session: Data Science 2                                   |
| Schoonees, Pieter | Model Selection for Linear Regression Under Data Aggregation                                                                                                                                            | Erasmus University Rotterdam                           | Netherlands    | Monday 15, 16:20-16:40, Room 3, session: Visualization                                      |
| Schuch, Ivan      | P-value Adjusted Selected Tree Ensemble                                                                                                                                                                 | Rolls-Royce Motor Cars                                 | United Kingdom | Pending                                                                                     |
| Shults, Justine   | Accounting for the Shutdown Due to the COVID Pandemic in an Analysis of Multivariate Data from a School and Medical Practice-Based Intervention: the West Philadelphia Asthma Care Implementation Study | University of Pennsylvania                             | United States  | Thursday 18, 16:40-17:00, Room 2, session: Modeling Multivariate Data                       |
| Solís, Maikol     | Machine learning-driven COVID-19 early triage and large-scale testing strategies based on the 2021 Costa Rican Actualidades survey                                                                      | Universidad de Costa Rica                              | Costa Rica     | Thursday 18, 10:10-10:30, Room 3, session: Machine Learning                                 |
| Solís, Maikol     | UMAP projections and the survival of empty space: A geometric approach to high-dimensional data                                                                                                         | Universidad de Costa Rica                              | Costa Rica     | Monday 15, 17:40-18:00, Room 3, session: Big Data and High-Dimensional                      |
| Stier, Quirin     | An efficient multicore CPU implementation of the DatabionicSwarm                                                                                                                                        | University of Marburg                                  | Germany        | Wednesday 17, 09:10-09:30, Room 1, session: Clustering, Classification and Discrimination 5 |
| Suwanwong, Anusa  | A Gene Selection Method for Classification with Three Classes Using Proportional Overlapping Scores                                                                                                     | University of Essex                                    | United Kingdom | Monday 15, 16:00-16:20, Room 1, session: Advances in supervised classification              |
| Tahiri, Nadia     | A new metric to classify B cell lineage tree                                                                                                                                                            | University of Sherbrooke                               | Canada         | Tuesday 16, 15:10-15:30, Room 2, session: Symbolic Data Analysis 3                          |
| Tahiri, Nadia     | phyDBSCAN: phylogenetic tree density-based spatial clustering of applications with noise and user-defined hyperparameters                                                                               | University of Sherbrooke                               | Canada         | Pending                                                                                     |

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| Tenorio de Carvalho,<br>Francisco de Asis | A fuzzy clustering algorithm with<br>entropy regularization for interval-<br>valued data                                                     | Universidade Federal de<br>Pernambuco        | Brazil        | Tuesday 16, 08:50-09:10,<br>Room 2, session: Symbolic<br>Data Analysis 1                                                       |
| Tran, H  l  ne                            | Multimodal Emotion Recognition:<br>A comparative study                                                                                       | LIMOS, Clermont<br>Auvergne University       | France        | Tuesday 16, 09:50-10:10,<br>Room 1, session: Clustering,<br>Classification and<br>Discrimination 2                             |
| Van de Velden, Michael                    | Nearest neighbors for mixed type<br>data: an inter-dependency based<br>approach                                                              | Erasmus University<br>Rotterdam              | Netherlands   | Monday 15, 16:40-17:00,<br>Room 3, session:<br>Multidimensional data<br>visualization or Image<br>Analysis and Computer Vision |
| Verde, Rosanna                            | A Robust approach of the<br>Clusterwise Regression method for<br>distributional data                                                         | University of Campania<br>"Luigi Vanvitelli" | Italy         | Tuesday 16, 10:30-10:50,<br>Room 2, session: Symbolic<br>Data Analysis 2                                                       |
| Vermunt, Jeroen                           | Mixture Multigroup Structural<br>Equation Modeling: Comparing<br>Structural Relations Across Many<br>Groups                                  | Tilburg University                           | Netherlands   | Thursday 18, 08:30-08:50,<br>Room 1, session: Model-<br>Based Clustering 1                                                     |
| Vidal, Marc                               | Classification of neuroscientific<br>data under the probabilistic<br>principles of near-perfect<br>classification                            | IPEM, Universiteit Gent                      | Belgium       | Thursday 18, 09:10-09:30,<br>Room 3, session: Functional<br>Data Analysis                                                      |
| Vilchez, Vivian                           | Machine learning-driven COVID-<br>19 early triage and large-scale<br>testing strategies based on the 2021<br>Costa Rican Actualidades survey | Universidad de Costa<br>Rica                 | Costa Rica    | Pending                                                                                                                        |
| Villalobos Carballo.<br>Kimberly          | TabText: A Flexible and Contextual<br>Approach to Tabular Data<br>Representation                                                             | Massachusetts Institute<br>of Technology     | United States | Tuesday 16, 17:00-17:20,<br>Room 2, session: Applications                                                                      |
| Wołyński, Waldemar                        | Applying classification methods for<br>multivariate functional data                                                                          | University of Kalisz                         | Poland        | Pending                                                                                                                        |
| Yuan, Shuai                               | Understanding Algorithm Fairness<br>in Personnel Selection Through the<br>Lens of Organization Justice<br>Theory                             | University of<br>Amsterdam                   | Netherlands   | Thursday 18, 09:50-10:10,<br>Room 2, session: Explainable<br>Artificial Intelligence (XAI)                                     |