

Editorial

This new issue introduces the fifth volume of JIDM, which inaugurates the work of Ana Carolina Salgado as the new Editor-in-Chief. We would like to thank the excellent work of Alberto Laender as the previous Editor-in-Chief, and the editorial board for their hard work. To work with the new Editor-in-Chief, a new editorial board is in place. We also thank them for accepting to contribute with JIDM.

This issue brings two sections with papers from SBBD, the XXXIII Brazilian Symposium on Databases, and KDMiLe. SBBD was held last October in Recife, while KDMiLe (Symposium on Knowledge Discovery, Mining and Learning) was held in São Carlos, last July. Each of these sections had a guest editor who was in charge of selecting the papers and conducting the evaluation process. Renato Fileto and Alexandre Plastino served as the guest editors of SBBD and KDMiLe, respectively.

The first section brings five articles that are extended and revised versions of selected short papers presented at SBBD 2013. The first article, by Papani, de Amo and Soares, is entitled “FPSMining: A Fast Algorithm for Mining User Preferences in Data Streams” and proposes an algorithm to mine contextual preferences in data streams. The second article, by El-Jaick, Mattoso and Lima, is entitled “SGProv: Summarization Mechanism for Multiple Provenance Graphs” and proposes a summarization approach aiming at increasing the performance of queries over provenance graphs. The third article, by Araújo et al., is entitled “ARE-SQL: An Online, Automatic and Non-Intrusive Approach for Rewriting SQL Queries” and proposes a technique for rewriting SQL queries to improve execution performance. The fourth article, by Mestre and Pires, is entitled “Efficient Entity Matching over Multiple Data Sources with MapReduce” and tackles the problem of entity matching over large data sources. The solution is based on MapReduce. Finally, the fifth article, by Brandão, Moro and Almeida, is entitled “Experimental Evaluation of Academic Collaboration Recommendation Using Factorial Design” and evaluates the impact of key parameters of two state of the art functions that recommend academic collaborators. All these articles describe ongoing work and have been selected by the SBBD 2013 program committee for their quality and innovative ideas.

The second section includes extended and revised versions of eight selected papers from KDMiLe 2013. The first paper is entitled “Strategies for Mining User Preferences in a Data Stream Setting” is authored by Papani, de Amo and Soares. It implements a greedy algorithm to solve the contextual preference mining problem. The second article, by Andrade and Ribeiro, entitled “Similarity Search in Multidimensional Time Series using the Coulomb’s Law”, proposes a time series descriptor to perform similarity search over multidimensional time series. The third article, “Classifying High-Speed Data Streams Using Statistical Decision Trees”, by Cazzolato and Ribeiro, propose two classification algorithms that do not depend on the amount of data available. The fourth article, by Nóbrega and Marinho is entitled “Predicting the Learning Rate of Gradient Descent for Accelerating Matrix Factorization”. It uses simple linear regression models for predicting a good learning rate to the gradient descent numerical method. The fifth article, “A Fuzzy Decision Tree Model to Support the Task of Bus Reallocation in Public Transport Systems”, by Cintra, Ribeiro and Neves, tackles the problem of reallocating buses from different lines of a previously planned system in case of restrictions regarding the breakdown of vehicles and/or absent driver. The sixth article, by Bonin, Marcacini and Rezende, is entitled “Unsupervised Instance Selection from Text Streams”, and uses text clustering methods for unsupervised instance selection from text streams. The seventh article “Exploring Attribute Selection in Hierarchical Classification”, by Paes, Plastino and Freitas, explores attribute selection techniques in conjunction with hierarchical classifiers from different categories, with the goal of improving their respective performances. Finally, the eighth article is entitled “A Constructive Density-Ratio Approach to Mutual Information Estimation: Experiments in Feature Selection” and authored by Braga. The article proposes a new Mutual Information estimation called VMI.

We would like to thank everybody who contributed to this edition of JIDM, particularly reviewers

for their valuable comments and authors for their contributions and hard work in preparing their final manuscripts.

Ana Carolina Salgado
Editor-in-Chief

Vanessa Braganholo
Associate Editor

Renato Fileto
Short Papers Guest Editor

Alexandre Plastino
KDMiLe Guest Editor

