

# Editorial

This special issue of the thirteenth volume of *Journal of Information and Data Management* (JIDM) comprises extended versions of papers published in the proceedings of the Short, Vision, and Industrial track of the Brazilian Symposium on Databases (SBBB) in 2021. SBBB is the most important forum for discussing recent research outcomes in the database and data science area in Latin America. The track dedicated to Short, Vision and Industrial paper aims at giving visibility to relevant ongoing research in the area, conducted in academia and industry. This track also welcomes visionary ideas that may trigger further discussion and research endeavors. This issue consists of 8 articles submitted and reviewed by experts of the Brazilian database community. Covered topics include data modeling, data mining, information integration, data quality, data applications and data ecosystems.

This special issue starts with the article entitled *Exploring the Intersection between Databases and Digital Forensics*, by Danilo Seufitelli, Ana Flávia Moura, Ayane Fernandes, Kayque Siqueira, Michele Brandão and Mirella Moro. Their paper presents a systematic literature review in the light of the intersection between Digital Forensics and Databases. Based on that, the paper discusses problems and trends of two main categories: Data Building and Database Management Systems.

In the second paper, entitled *Analysis of the Influence of Modeling, Data Format and Processing Tool on the Performance of Hadoop-Hive Based Data Warehouse*, Beatriz Oliveira, Marcio Victorino and Maristela Holanda provide an evaluation on three factors that can significantly influence the performance of Big Data Hive queries. The three aspects regard data modeling, data format and processing tool.

The third paper, entitled *Evaluation of Automatic Speech Recognition Approaches*, describes an evaluation of the performance of commercial solutions for Automatic Speech Recognition that use deep learning models, such as Facebook Wit.ai, Microsoft Azure Speech, Google Cloud Speech-to-Text, Wav2Vec, and AWS Transcribe. The paper is authored by Matheus Xavier Sampaio, Ticiania Coelho da Silva, Regis Magalhães, Lívia Cruz, Davi Romero, Marianna Ferreira and José Macedo.

The fourth article presents a comparative study of data management approaches to support interactive visualizations. To this end, it investigates the performance of Apache Drill, Apache Spark, Elasticsearch, MonetDB and PostgreSQL to process multiple spatiotemporal queries. The paper, entitled *Beyond Click-and-View: a Comparative Study of Data Management Approaches for Interactive Visualization*, is authored by Lorena Nascimento, Marcos Lage and Daniel de Oliveira.

The next paper of this special issue discusses an evaluation on different feature selection techniques on open educational data based on a genetic algorithm with a flexible fitness function. The paper, entitled *A Genetic Algorithm with Flexible Fitness Function for Feature Selection in Educational Data: Comparative Evaluation*, is authored by Danielle Albuquerque, Luís Tarrataca, Diego Brandão and Rafaelli Coutinho.

The sixth paper, entitled *Data management in Digital Twins for the Oil and Gas Industry: beyond the OSDU Data Platform*, by Jaqueline Correia, Fabrício Rodrigues, Nicolau Santos, Mara Abel and Karin Becker, analyzes to what extent the OSDU data platform meets the needs of a DFC implementation. The paper focuses on interoperability, integration, governance, and data lineage as well as on the proposition of additional resources for data management.

The seventh article, entitled *FASED: A Framework for Data Ecosystems Health Evaluation*, introduces a framework for data Ecosystem health evaluation composed of a set of indicators and metrics, which assess the Data Ecosystem's current state and its ability to stay healthy over time. The authors of this paper are Gloria de Fátima Lima, Marcelo Iury Oliveira and Bernadette Farias Lóscio.

The final paper, entitled *SentiLexBR: An Automatic Methodology of Building Sentiment Lexicons for the Portuguese Language*, covers sentiment lexicon issues. The paper presents a methodology, called SentiLexBR, which uses probabilities of the Bayes' Theorem for building a set of sentiment lexicons. The paper is authored by Tiago de Melo.

The JIDM Editorial board is very thankful to all authors and reviewers for their valuable contributions towards the creation of this rich special issue. We wish you all pleasant and insightful readings.

Maristela Holanda  
*Editor-in-Chief*

Damires Souza  
IFPB Federal Institute of Paraiba  
*SBBB Short, Vision, Industrial Special Issue Editor*