DATA MINING USING RAPIDMINER FOR MIXED METHODS RESEARCH

Brígida Mónica Faria¹, Luis Paulo Reis²,

¹ Polytechnic of Porto, Portugal, moni.faria@gmail.com
² University of Minho, Portugal.lpreis@dsi.uminho.pt

Abstract: Mixed methods research includes mixing qualitative and quantitative data, methods, methodologies, and/or paradigms in a research study or set of related studies. Mixed methods research enable to provide a more complete view, and use correct/adequate methods for the different phases of a research project which enables to achieve better and more complete results. However, typically the quantitative methods used in the context of mixed research methods are quite simple and based on descriptive, inferential statistics. This Tutorial/Workshop proposes the use of more advanced Data Mining methods in the context of mixed methods research supported by the use of a freeware, complete, user friendly and graphically oriented software package: Rapid Miner. The Tutorial will include an explanation of the concept and methods for data mining, followed by an explanation of the Rapid Miner software and concrete examples/exercises on its use.

Palavras-Chave: Data Mining; Mixed Methods; Rapid Miner.

Luis Paulo Reis
He is an Associate Professor at the University of Minho in Portugal and Director of LIACC – Artificial Intelligence and Computer Science Laboratory. During the last 25 years he lectured courses on Artificial Intelligence, Intelligent Robotics, Simulation and Computer Programming. He was principal investigator of more than 10 research projects and won more than 50 scientific awards. He supervised 16 PhD and 95 MSc theses to completion. He organized more than 50 scientific events and belonged to the Program Committee of more than 200 scientific events. He is the author of more than 250 publications in international conferences/journals.

Brígida Mónica Faria
She is an Invited Adjunct Professor at School of Allied Health Technologies - Polytechnic Institute of Porto. She is member of HMIC (Human Machine Intelligent Cooperation) group at LIACC (Laboratory of Artificial Intelligence and Computer Science). Her main research areas are Machine Learning, Data Mining, Intelligent Robotics, Human Machine Interfaces and Serious Games. She participated in 10 research projects and developed several fully-functional prototypes in these areas. She was co-chair of more than 10 international conferences and workshops with emphasis to IEEE ICARSC. She is the author of more than 50 journal/conference publications (indexed at SCOPUS and/or ISI Web of Knowledge).