
Merging Conceptual Structures for Conceptual Mining on Online Datasets

Nicolas Leutwyler^{*1,2}, Hervé Panetto , Diego Torres , and Mario Lezoche

¹Centre de Recherche en Automatique de Nancy – Université de Lorraine, Centre National de la Recherche Scientifique – Université de Lorraine, Campus Sciences, BP 70239, 54506

Vandoeuvre-les-Nancy Cedex, France

²Laboratorio de Investigación y Formación en Informática Avanzada [La Plata] – Facultad de Informática, Primer Piso - Calle 50 y 120, La Plata (1900), Buenos Aires, Argentina, Argentine

Résumé

Nowadays, ontology-based recommendation systems are commonplace among the recommendation methods for alternative products. These ontologies can be enriched by the usage of knowledge extraction methods such as Formal Concept Analysis. However, online datasets (i.e., they are being infinitely generated in real time) require certain techniques to be put in place to maintain a bounded-sized knowledge-base. Consequently, some knowledge will be lost in the process. In this article, we compare two algorithms to regain a part of the lost knowledge by merging conceptual structures (thus, enriching the final knowledge-base), on a real dataset, and present insights based on the comparison.

*Intervenant