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Integration of Data Mining Operations for Structural Health Monitoring

Data Integration is a well elaborated scientific area and one of the most important use cases of the Semantic Web. Techniques developed in this field aim at providing interoperability between heterogeneous data sources. Compared to typical Semantic Web use cases, data integration issues are manifold and also affect applications through their underlying schemas. Civil engineers specialized in risk and measurement analysis need a reliable Decision Support System (DSS) that integrates various required techniques. Hence, Structural Health Monitoring (SHM) applications tend to adopt typical integration concepts, but not by regarding data and their semantics independent from the application domain. Instead, such a DSS should be accessible in an integrated manner to support the usage of methods and techniques from different systems according to their intended operational purpose. This paper presents some practical examples of using Data Mining operations which enable a better understanding of the analysed data and which can be successfully integrated into a unified DSS for SHM.

Ключевые слова:

Содержание.
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