Special Issue

Emerging Feature Engineering Trends for Machine Learning

Message from the Guest Editors

Feature engineering is a crucial process aimed at building high-quality data representations from raw data that accurately capture the nature of the problem. Quality data directly impacts the performance of machine learning algorithms by improving their efficiency. In the case of inference algorithms, feature engineering could lead to interpretable models. In big data, obtaining quality data also represents a key element since they provide veracity and validity. It is necessary to develop and/or adapt feature engineering techniques that take into account the volume of data and the technologies, programming paradigms, and available platforms. This Special Issue aims to provide comprehensive coverage on new and state-of-the-art feature engineering and data preprecessing methods for standard and big data problems. Keywords

- data preprocessing
- smart data
- data munging
- data wrangling
- feature engineering
- data cleaning
- data normalization
- feature extraction
- feature selection
- data transformation
- data integration
- noise identification
- missing data
- data reduction
- data discretization
- instance selection
- instance generation
- class imbalance

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multidimensional network.

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