

Applied Descriptive Pattern Mining

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Abstract. Pattern mining, and more specifically descriptive pattern mining aims at extracting relevant "nuggets" of knowledge from a set of data. In this context, the focus is on descriptive applications, i.e., for explorative data mining, e.g., extracting knowledge for humans, instead of considering mainly automatic approaches, e.g., for classification. Prominent approaches for descriptive pattern mining include frequent pattern mining, supervised descriptive rule induction, and subgroup discovery but also descriptive community mining approaches.

The aim of this tutorial is to provide a general, comprehensive overview of the state-of-the-art of descriptive pattern mining. We consider different types of data such as structured (tabular) data, texts, and networks.

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