# Community and Pattern Analytics in Social Networks

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**Abstract.** Various social applications provide for a broad range of user interaction and communication. In this setting, data mining and analysis plays a central role, e.g., for automatically detecting roles, communities, and interesting relationships. In this context, we focus on analytical and exploratory data mining approaches. These range from role analysis to community detection, analysis and assessment.

The aim of this tutorial is to provide an overview on approaches for mining and analysis of patterns and communities in offline and online social networks. Exemplary practical applications include the social bookmarking system BibSonomy (`http://www.bibsonomy.org`) and the social conference guidance system Conferator (`http://www.conferator.org`).

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