

Learning in Social Networks

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Abstract The study of Social Networks advanced significantly during last years, with the development of sophisticated techniques for Social Network Analysis and Mining, driven by a strong demand from Web 2.0 applications: social web sites, e-mails and IM systems. The applications includes classification systems (text classification, churn, ...), the detection of users communities and recommendation systems. Social Network Analysis faces difficult problems, like modeling the nature of social interactions, mining structured data (social graphs, text, heterogeneous data), or understanding the dynamic of the social networks. Moreover, the applications typically generate huge datasets, with networks counting several millions of nodes, and the mining algorithm have to deal with the data using limited computing resources. In this communication, we will present several problematics arising in Social Network Analysis, describe some recent advances and give some examples showing how social graph encoding can improve data mining tasks.