Building an Ontology for Researchers: An Application of Topic Maps and Social Information

Authors : Yu Hung Chiang, Hei Chia Wang

Abstract : In the academic area, it is important for research to find proper research domain. Many researchers may refer to conference issues to find their interesting or new topics. Furthermore, conferences issues can help researchers realize current research trends in their field and learn about cutting-edge developments in their specialty. However, online published conference information may widely be distributed; it is not easy to be concluded. Many researchers use search engine of journals or conference issues to filter information in order to get what they want. However, this search engine has its limitation. There will still be some issues should be considered; i.e. researchers cannot find the associated topics which may be useful information for them. Hence, use Knowledge Management (KM) could be a way to resolve these issues. In KM, ontology is widely adopted; but most existed ontology construction methods do not consider social information between target users. To effective in academic KM, this study proposes a method of constructing research Topic Maps using Open Directory Project (ODP) and Social Information Processing (SIP). Through catching of social information in conference website: i.e. the information of co-authorship or collaborator, research topics can be associated among related researchers. Finally, the experiments show Topic Maps successfully help researchers to find the information they need more easily and quickly as well as construct associations between research topics.
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