عنوان مقاله:

Profile Matching in Heterogeneous Academic Social Networks using Knowledge Graphs

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## خلاصه مقاله:

With the increasing popularity of academic social networks, many users join more than one network to benefit from their unique features. However, matching the profiles of a user, despite being crucial for data verification and update synchronization, is challenging due to the differences in profile structures across different networks. In this paper, we propose an academic profile-matching approach that utilizes an Academic Knowledge Graph (AKG) to overcome the diversity problem in profile structures. Our approach includes three components: (\) candidate profile generation, which retrieves related profiles from the target network based on name similarity to the source profile; (\(\gamma\)) profile enrichment, which uses AKG to discover relations between the attributes of the source and target profiles; and (\(\gamma\)) profile matching, which selects one candidate as a matched profile. Through experiments on real-world datasets, we demonstrate that the proposed approach is effective in matching academic profiles across different networks, outperforming state-of-the-art baselines.

كلمات كليدى:

Entity Matching, Heterogeneity, Academic Social Networks, knowledge graph

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