

Is Web Content a Good Proxy for Real-Life Interaction?

A Case Study Considering Online and Offline Interactions of Computer Scientists

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Online social relationship can represent a significant share of an individual's *social profile*, in addition to the interactions that take place *offline*, e. g., when meeting friends, during a face-to-face conversation, etc. So far, the analysis of online social networks has received significant attention in the research community, while studies on offline interactions at large scale, e. g., focusing on networks of face-to-face proximity, has only been taken up recently.

We start filling this gap by analyzing *online* and *offline* social networks and published content of computer scientists who visited particular conferences. We investigate whether information from various online sources can be used as a proxy for the offline world.

Our results [1] indicate that in many cases online and offline datasets still have structural differences at large. However, strong ties seem to correlate better than weak ones and for “important persons” there are proxy relations between the online and the offline world. We also observed examples of a successful application of online data for offline scenarios, specifically relating to the analysis of content and characteristic subgroups. Our results show that the considered online data is not an ideal proxy for offline information overall, but still provides some important indications about offline relationships.

References

1. Kibanov, M., Atzmueller, M., Illig, J., Scholz, C., Barrat, A., Cattuto, C., Stumme, G.: Is web content a good proxy for real-life interaction? a case study considering online and offline interactions of computer scientists. In: Proceedings of the 2015 ACM/IEEE International Conference on Advances in Social Networks Analysis and Mining, ASONAM 2015, Paris, France, August 25-28, 2015 (2015)