Title: Tourist segmentation method with Big Data using complex networks

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Abstract:

The study shows the utility of the complex network approach for tourist segmentation, making use of big data from user-generated content in tourism web-sites. The users are linked to their activities in the destination, forming a bipartite network, and then recent clustering methods adapted to this kind of networks are applied. As a case study, we make use of data from tripadvisor in Saint Augustine, Florida, US. Two segmentation methods are analysed: 1) A-priori, where users are aggregated in tourist interests declared by them; 2) A-posteriori, where information is not aggregated and group of users are identified after applying the clustering methods. Statistical validation methods are also applied.