

[Publications](#)[Archive](#)[Volumes](#)[Full Text Search](#)[Title and Author Search](#)[Annals](#)[ISPRS Journal](#)[ISPRS Journal Geo-Info](#)[ISPRS eBulletin](#)[ISPRS Highlights](#)[Book Series](#)[Brochure](#)[ISPRS Profile](#)[Annual Reports](#)[Related Publications](#)[Booklets](#)

[Volume XL-2/W3](#)

Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XL-2/W3, 115-120, 2014
www.int-arch-photogramm-remote-sens-spatial-inf-sci.net/XL-2/W3/115/2014/
doi: 10.5194/isprsarchives-XL-2-W3-115-2014

EXTRACTING HUMAN BEHAVIORAL PATTERNS BY MINING GEO-SOCIAL NETWORKS

M. Forghani and F. Karimipour

Department of Surveying and Geomatic Engineering, College of Engineering, University of Tehran, Tehran 14174, Iran

Keywords: Geo-Social Network, Check-in, Association Rules, Category of Venue, Data Mining

Abstract. Accessibility of positioning technologies such as GPS offer the opportunity to store one's travel experience and publish it on the web. Using this feature in web-based social networks and considering location information shared by users as a bridge connecting the users' network to location information layer leads to the formation of Geo-Social Networks. The availability of large amounts of geographical and social data on these networks provides rich sources of information that can be utilized for studying human behavior through data analysis in a spatial-temporal-social context.

This paper attempts to investigate the behavior of around 1150 users of Foursquare network by making use of their check-ins. The authors analyzed the metadata associated with the whereabouts of the users, with an emphasis on the type of places, to uncover patterns across different temporal and geographical scales for venue category usage. The authors found five groups of meaningful patterns that can explore region characteristics and recognize a number of major crowd behaviors that recur over time and space.

[Conference Paper](#) (PDF, 2097 KB)

Citation: Forghani, M. and Karimipour, F.: EXTRACTING HUMAN BEHAVIORAL PATTERNS BY MINING GEO-SOCIAL NETWORKS, Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XL-2/W3, 115-120, doi: 10.5194/isprsarchives-XL-2-W3-115-2014, 2014.

[Bibtex](#) [EndNote](#) [Reference Manager](#) [XML](#)

