### LBSN 2011 Workshop Report

# The Third ACM SIGSPATIAL International Workshop on

## Location-Based Social Networks (LBSN 2011) Chicago, Illinois - November 1, 2011

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Social networks have been prevalent on the Internet, attracting many professionals from a variety of fields. By adding a location dimension, we can bring online social networks back to the physical world and share our real-life experiences in the virtual world conveniently. In Location Based Social Networks (LBSN), people cannot only track and share location-related information with each other via either mobile devices or desktop computers, but also leverage collaborative social knowledge learned from user-generated and location-related contents. As location is one of the most important properties in people's daily lives, LBSN will bridge the gap between online societies and the physical world and enable a lot of novel applications changing the way we live, such as travel planning, location/friend recommendations, community discovery, human mobility modeling and user activity analysis. The technology derived from LBSN, e.g., location trajectory mining and retrieval, can also be applied to a multitude of other research areas including biology, sociology, geography, and climatology, etc. The objective of this workshop is to provide professionals, researchers, and technologists with a single forum where they can discuss and share the state-of-the-art of LBSN development and applications, present their ideas and contributions, and set future directions in emerging innovative research for location based social networks.

LBSN 2011 received 26 submissions from 12 countries/regions. Each paper was assigned to three reviewers for a review. Finally, we accepted 10 full papers (8 pages each) and 4 short papers (4 page each) [1]. Table I shows a statistic on these papers, and Table II presents the statistics across the past three years.

Table I. Statistics on the accepted papers of LBSN 2011

Continents	Submissions	Accepted	Acceptant Rate	Among total accepted papers
Asia	12	6	50%	42.9%
Europe	10	6	60%	42.9%
North American	4	2	50%	14.3%

Table II. Statistics on accepted papers in the past three LBSN workshops

Years	Submissions	Accepted	Rates	Full papers
2009	15	8	53.3%	40%
2010	15	10	66.7%	53.3%
2011	26	14	53.8%	38.5%

The program of LBSN 2011 was organized as follows.

- Invited talk: Mining Public Transport Usage for Personalized Intelligent Transport Systems.

Speaker: Licia Capra, Senior Lecturer from University College London

Session 1 (55min): Human mobility and locality

Chair: Licia Capra, University College London, United Kingdom

Session 2 (90min): Trajectories in LBSNs

Chair: Christian S. Jensen, Aarhus University, Denmark

Session 3 (100min): Twitter for LBSNs

Chair: Takahiro Hara, Osaka University, Japan

Session 4 (65min): Activities in LBSNs

Chair: Feng Lu, Chinese Academy of Sciences, China

- Business meeting (17:05)

Given the attractive topic and nice organization, we made a new record in the number of attendees (43 people). Speakers presented many interesting talks and audiences had a lot of discussion during the workshop. Three papers were identified as the paper award candidates according to the reviews. Finally, one best paper and one best student paper were recognized by the best paper award committee based on both paper reviewers and presentation.

#### The Best Paper Award:

Alexei Pozdnoukhov, Christian Kaiser. Space-Time Dynamics of Topics in Streaming Text.

#### The Best Student Award:

Shoko Wakamiya, Ryong Lee, Kazutoshi Sumiya. Crowd-based Urban Characterization: Extracting Crowd Behavioral Patterns in Urban Areas from Twitter.

In this workshop, we also shared some free data sources for research (e.g., <u>GeoLife GPS trajectories</u> and <u>T-Drive GPS trajectories</u>) and one related book, titled <u>Computing with Spatial Trajectories</u> [2]. Detailed information about LBSN 2011 can be found on <u>this website</u> [3].

In the business meeting, we believe LBSN becomes increasingly popular, contributing many interesting applications and challenging research problems. All the participants look forward to the next workshop.





#### References

- 1. Christian S. Jensen, Wang-Chien Lee, Yu Zheng, Mohamed F. Mokbel. Proceeding of the 3<sup>rd</sup> ACM SIGSPATIAL International Workshop on Location-Based Social Networks. ACM, ISBN: 978-1-4503-1033-8
- 2. **Yu Zheng** and Xiaofang Zhou, Computing with Spatial Trajectories. Springer 2011. ISBN: 978-1-4614-1628-9
- 3. http://research.microsoft.com/en-us/projects/lbsn/default.aspx
- 4. <a href="http://research.microsoft.com/en-us/projects/trajectorycomputing/default.aspx">http://research.microsoft.com/en-us/projects/trajectorycomputing/default.aspx</a>