

3rd ACM SIGSPATIAL Workshop on Analytics for Local Events and News (LENS 2019)

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The 3rd ACM SIGSPATIAL Workshop on Analytics for Local Events and News (LENS 2019) was held in conjunction with the 27th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL 2019). The workshop is intended to bring together experts in the workshop scope to exchange ideas on opportunities, challenges and cutting-edge techniques for local events and news analytics. The workshop has attracted ten submissions, all full-length research papers. Six submissions were accepted for publications; with 60% acceptance rate. The papers are reviewed by 7 program committee members, where each paper is assigned to two reviewers. Total 8 attendants registered for the workshop. The actual number of attendants along the day fluctuated from 8 to 12, with an average of 9 attendants maintained almost all the time. The paper titled *DeepSpot: Understanding Online Opinion Spam by Text Augmentation using Sentiment Encoder-Decoder Networks*, by Avik Nayak, Haiquan Chen, Xiaojun Ruan, and Jinsong Ouyang was awarded the best paper award. The paper titled *Scalable Community Detection over Geo-Social Network*, by Xiuwen Zheng, Qiyu Liu, and Amarnath Gupta was awarded the best presentation award. The workshop has achieved its goal in bringing up together experts and conducted a set of productive discussions and talks.

The workshop has featured two excellent keynote speakers. The first keynote was by Dr, Grant McKenzie from the Department of Geography at McGill University in Montréal, Canada. He leads the Platial Analysis Lab, an interdisciplinary research group that works at the intersection of data science and behavioral geography. His talk title was “*Local Dimensions: Towards Platial data analytics*”. The talk focuses on the multifaceted nature of places. Our ability to experience space can change radically based on the time of the day or even our social or economic condition. The idea that the same space, i.e., the same physical location, can be characterized by way more dimensions than just a point in a 3D space is the foundation of place-based modeling. During the keynote, an example of applications deriving from place-based modeling has been discussed such as temporally enhanced reverse geocoding and, city similarity based on user-generated tourist attraction reviews. The talk has provided a very effective overview of platial data analytics as a field built upon the processing of heterogeneous data and recent advances in computation and statistics.

The second keynote was by Alexander Visheratin from ITMO University, Russia. He is a senior researcher at ITMO University where he has been working on a wide variety of problems related to data storage and processing. His talk title was “*Multiscale event detection and forecasting in complex urban environments*”. The talk focuses on the challenges of collecting and analyzing data for detecting events happening in a big

city. These span from data crawling, to data filtering for removing undesired noisy data, to the challenge of plugging in reliable learning tools for prediction. A very important aspect addressed during the talk is the new opportunities provided by temporary content analysis (like Facebook stories). The talk provided a very complete description of the work done by the research team at ITMO University and it has demonstrated the effectiveness and efficiency of the proposed approach using several real-world datasets.