

FREIE UNIVERSITÄT BERLIN  
Fachbereich Mathematik und Informatik

Promotionsbüro, Arnimallee 14, 14195 Berlin

## DISPUTATION

**Mittwoch, 20. Dezember 2017, 16.15 Uhr**

**Ort: Seminarraum 051, Institut für Informatik  
Takustr. 9, 14195 Berlin**

**Disputation über die Doktorarbeit von**

**Herrn Paras Mehta**

**Thema der Dissertation:**

**Spatial, Temporal, and Textual  
Retrieval and Analysis of Geotagged Posts**

**Thema der Disputation:**

**Location-Aware Retrieval and Analysis  
of Geotagged Social Network Posts**

Die Arbeit wurde unter der Betreuung von **Prof. A. Voisard, Ph.D.** durchgeführt.

**Abstract:** The proliferation of GPS-equipped mobile devices and online social networks has led to the creation of increasingly large volumes of spatio-textual data, i.e., data containing spatial and textual information, such as geotagged messages on Twitter and reviews for restaurants on Foursquare. Similarly, a growing amount of Internet searches now carry a spatial intent. From looking up nearby grocery stores to searching for local news, we increasingly use the Internet to find local information. Due to these factors, queries combining spatial and textual predicates, termed spatial keyword queries, have been studied extensively over the past few years.

Although different types of spatial keyword queries have been studied in the literature, the majority of existing research focuses mainly on static settings, such as searching for information about places. On the other hand, geotagged posts by users on social networks present new opportunities and challenges for research due to their dynamic and crowdsourced nature, and massive quantity. Thus, in this talk, we present methods for querying and analyzing geotagged social network posts. We discuss a variety of problems in this area, including retrieving user trajectories, identifying selected representative posts for exploration of large datasets, continuous summarization of a stream of posts, discovery and exploration of trending topics, and mining associations between locations based on user movement and behavior.

Die Disputation besteht aus dem o. g. Vortrag, danach der Vorstellung der Dissertation einschließlich jeweils anschließenden Aussprachen.

**Interessierte werden hiermit herzlich eingeladen**

Der Vorsitzende der Promotionskommission

