Seminar: "Text Mining in Twitter: Applications"

Summer Semester 2015

Course Description:

Twitter is an online social networking service that enables users to send and read short 140-character messages called "tweets". Registered users can read and post tweets, but unregistered users can only read them. Polls and surveys of data miners are showing twitter's popularity has increased substantially in recent years. The company experienced rapid growth. It had 400,000 tweets posted per quarter in 2007. This grew to 100 million tweets posted per quarter in 2008. As of September 2013, the company's data showed that 200 million users send over 400 million tweets daily, with nearly 60% of tweets sent from mobile devices.

Twitter has crossed the path of scientific research in many ways. In this seminar, we will focus on different applications where **text mining in Twitter** is used to perform **state-of-the-art predictions**. We will review different domains, applications and techniques (among others) for

- predicting the outcome of presidential elections,
- forecast the movement of stock prices,
- foresee the spreading of disease, such as the flu,
- improve the reactions upon natural disasters,
- estimate the revenue of cinema films and business marketing.

Individual assignments will consist of a specific domain of applications which will be presented during the seminar. Each participant will find sample papers to demonstrate the functionality him/herself.

Target Group:

This Seminar specifically addresses students in the M.Sc. Economics and M.Sc. VWL programs. Interested and committed B.Sc. VWL and BWL students may also participate.

Organization:

Registration: from February 23, 2015 to April 13, 2015

Application via email to stefan.feuerriegel@is.uni-freiburg.de with the following details:

- First name, last name

- Matriculation number (Matrikelnummer)

- Email, phone number

- Study program, semester

- Previous grades in statistics, econometrics and computational economics

Response whether application was successful in the beginning of April, 2015

First meeting: May 08, 2015 10 am

Room 2330

Final presentation: In summer 2015 (date to be announced)

Communication:

All announcements, handouts, etc. will be sent via email.

Topics:

Exact topics along with hints on literature will be announced at a later point. Each participant will give an introduction into a specific domain of applications.

Policies and Procedures

Grading: Draft of seminar paper (about 10 to 15 pages), corrected version thereof and final presentation
The seminar paper can be written in English only.

Credit points: 4

Credit points are applicable to: Wirtschaftsinformatik, BWL

Chair: Prof. Dr. Dirk Neumann
Albert-Ludwigs-Universität
Chair of Information Systems
Platz der Alten Synagoge
79085 Freiburg
Germany