Complex Event Processing in Social Media

Călin RAILEAN, Monica BORDA, Alexandra MORARU

Abstract

In a world where virtual communities get ahead, social media, supported by web and mobile technologies, represents a valuable source of large amounts of data that can encompass the information shared between individuals related to the traffic conditions. Therefore, a metric that measures the logical link between traffic condition and tweets reported in social media, can be useful in estimating the traffic impact. Accordingly, responsible authorities are provided with a measure of the resources needed for handling them, which can contribute to improving facilities such as public transportation services or traffic estimations. This paper aims to analyse the traffic condition covered in social media, more specifically, in twitter data and to reveal the correlation between traffic conditions and twitter messages. We suggest an automatic method for this association in order to discover its impact and importance. The proposed method is tested on a real world dataset and the results show a positive correlation between the automatic method and a set of manually evaluated associations. The usefulness of this research consists of forecasting public transportation needs and supporting events' organisers to better arrange their planned activities. The results have real applicability and are filled with consistent interpretations.

Biography

Călin RAILEAN, student Technical University of Cluj-Napoca Faculty of Electronics, Telecommunications and Information Technology 26-28 Barițiu Street, 400027 Cluj-Napoca, ROMANIA E-mail: calinraileanfirst@yahoo.com Manuscript received on May 15, revised on September 9, 2014