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Derczynski, Leon (2014) *Leveraging the Power of Social Media*. In: *USES 2014 - The University of Sheffield Engineering Symposium*, 24 June 2014, The Octagon Centre, University of Sheffield.

10.15445/01022014.16

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Leveraging the Power of Social Media

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Abstract

From a business and government point of view there is an increasing need to interpret and act upon information from large-volume, social media streams, such as Twitter, Facebook, and forum posts. While natural language processing from newswire has been very well studied in the past two decades, understanding social media content has only recently been addressed in NLP research.

Social media poses three major computational challenges, dubbed by Gartner the 3Vs of big data: volume, velocity, and variety. NLP methods, in particular, face further difficulties arising from the short, noisy, and strongly contextualised nature of social media. To address the 3Vs of social media, novel language technologies have emerged, e.g. using locality sensitive hashing to detect new stories in media streams (volume), predicting stock market movements from tweet sentiment (velocity), and recommending blogs and news articles based on users' own comments (variety).