



RESEARCH ARTICLE

Methodologies for Trend Detection Based on Temporal Text Mining

M. BANU PRIYA¹, Dr. A. KUMARAVEL²

¹Department of Computer Science, Bharath University, India

²Department of Computer Science, Bharath University, India

Abstract— We present two methodologies for the detection of emerging trends in the area of textual data mining. These manual methods are intended to help us improve the performance of our existing fully automatic trend detection system [3]. The first methodology uses citations traces with pruning metrics to generate a document set for an emerging trend. Following this, threshold values are tested to determine the year that the trend emerges. The second methodology uses web resources to identify incipient emerging trends. We demonstrate with a confidence level of 99% that our second approach results in a significant improvement in the precision of trend detection. Lastly we propose the integration of these methods for both the improvement of our existing fully automatic approach as well as in the deployment of our semi-automated CIMEL [20] prototype that employs emerging trends detection to enhance multimedia-based Computer Science education.

Full Text: <http://www.ijcsmc.com/docs/papers/April2013/V2I42013120.pdf>