

Analyzing stock price changes using event related Twitter feeds

Satyabrata Aich¹, Hee-Cheol Kim¹, Mangal Sain², Bijay Bhaskar Deo³

¹Department of computer engineering, Inje University, S. Korea

²Department of Computer Engineering, Dongseo University, S. Korea

³Department of computer science, Syracuse University, USA

satyabrataaich@gmail.com, heeki@inje.ac.kr, mangalsain1@gmail.com, deo.developer@gmail.com

Abstract— For many years twitter has been the key source for providing the sentiments of the people in the real time, which are helpful for analyzing the stock market. But after certain event happened the sentiments of people became more predominant on the stock price. This paper describes about the stock prices changes over the event related day wise tweet sentiment score. We have over 200000 tweets over the period of 5 days. We have analyzed the stock market values collected from yahoo finance. We have done the keyword analysis of tweets to find the frequent keywords used during the period about the event and also we have seen the trend of keyword used over the period. After all the analysis and observation we found some positive correlation between the stock prices changes and the average sentiment score.

Keyword— Sentiment analyses, stock market, twitter, sentiment score, tweets



Mangal Sain received the M.Sc. degree in computer application from India in 2003 and the Ph.D. degree in computer science in 2011. Since 2012, he has been an Assistant Professor with the Department of Computer Engineering, Dongseo University, South Korea. His research interest includes wireless sensor network, cloud computing, Internet of Things, embedded systems, and middleware. He has authored over 30 international publications including journals and international conferences. He is a member of TIIS and a TPC member in several international conferences

Satyabrata Aich is working as a researcher in the field of computer engineering. He has over four years of teaching, research and industry experience in India and abroad. He has published many research papers in journals and conferences in the realms of Supply Chain Management and data analytics. His research interests are natural language processing, Machine learning, supply chain management, data mining.

Hee-Hee Kim received his BSc at Department of Mathematics, MSc at Department of Computer Science in SoGang University in Korea, and PhD at Numerical Analysis and Computing Science, Stockholm University in Sweden in 2001. His primary concerns are u-Healthcare, smart home technology, e-learning and Human Computer Interaction (HCI). He is associate professor at Department of Computer Engineering, Inje University in Korea. He has published many research papers in journals and conferences in the realms of HCI and CSCW.

Bijaybhaskar deo Graduated from Syracuse University with Masters in Computer Science. He has 10 years of professional experience in IT Industry involving in various phases of Software development including design, development, production support of robust, scalable products and applications on a variety of software platforms. Current, A product engineer on web analytics involving Big data areas.