Summarizing the Situation with Social Media Streams

Richard McCreadie[1]
[1] School of Computing Science, University of Glasgow, UK
Richard.Mccreadie@glasgow.ac.uk

Abstract. When a crisis hits, it is important for response agencies to quickly determine the situation on the ground, such that they can deploy the limited resources at their disposal as quickly and effectively as possible. However, during an emergency, information is difficult to come-by, as response units often need to arrive on the scene before the severity of the situation can be estimated. On the other hand, during emergencies, the general public is gravitating to social media platforms to ask for assistance and to show what they see to their friends. As such, emergency services are increasingly interested in technologies that can extract relevant information from social media during an emergency, to aid situational awareness. Meanwhile, real-time summarization is an emerging field that aims to build timeline summaries of events that are happening in the world, using news and social media streams as sensors. In this talk, I will provide an overview of what types of information emergency services want to extract from social media, and how real-time summarization systems can help achieve this. Furthermore, I will discuss current technologies and techniques for real-time summarization that are relevant to the crisis domain, along with the challenges that are yet to be solved.

Brief Biography: Dr. Richard McCreadie is a researcher within the Information Retrieval (IR) Group at the University of Glasgow, UK. He is an IR specialist, as well as developer and manager for the Terrier open source IR platform, which has been downloaded over 40,000 times since 2004. His research is focused on the interface between streaming IR and social media, tackling topics such as: information retrieval architectures for real-time stream processing; leveraging social media for event sensing (detecting events, extracting knowledge and summarizing those events); and evaluation methodologies for streaming IR. He has spent the last three years working on real-time event detection, summarization and search technologies for use during emergencies within EU FP7 SUPER Project (Social sensors for secUrity assessments and Proactive EmeRgencies management). Furthermore, he works with researchers and industry partners around the world to advance the IR field as co-chair of the real-time streaming summarization evaluation initiatives (2014-Present) at the Text Retrieval Conference (TREC).