

# Artificial Intelligence based Disaster Response Systems

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## **Abstract**

Social media has become an ever-active source of information especially during times of disasters. People share their experiences and are keen to know about the safety of their near ones. Twitter, a microblogging platform, receives real time information via informal conversations and it has, accordingly, become the main source of data for research studies based on emergency situational awareness. In this paper, the techniques that an emergency-related twitter feed monitoring system uses for collecting, processing and classifying the incoming tweets to extract valuable situational information out of them are briefly discussed. Thereafter, systems that reflect the state-of-art of drawing out actionable information using the tweets, which were tweeted relating to a specific disastrous event, are reviewed. Lastly, research challenges associated with design and development of such disaster response systems are discussed.

## **Keywords**

Disaster Response, Social Media, Situational Awareness