# Crisis Early Detection

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We are interested on an early detection of situations that could derive into crisis. There are many different techniques to detect a crisis that involves the analysis of the mentioned topics and the structure of the social network of the involved users. But all of them may be very costly. Generally they confirm the crisis a posteriori. Hence they are not optimal for a first alert. Moreover when dealing with big data, for example with 100 tweets per second.

Our goal is to detect local strange situations in the generation of contents that may derive into crisis. We want to do it, for example, trying to measure how the generated contents fit a normal distribution in a given period. When contents are generated normally (e.g. there are no crisis), independently from the volume (1 tweets per minute or 100 tweets per second), they fit a normal distribution with known mean and standard deviation. But when a crisis may be starting the distribution changes suddenly. We aim at measuring this change in order to provide a first alert that something is about to happen.

In this project, we would provide a big dataset of tweets with streaks of generation higher than 100 tweets per second. We might also provide with a real-time retrieval of this kind of “critical” contents in order to check the proposal in a real-time environment.