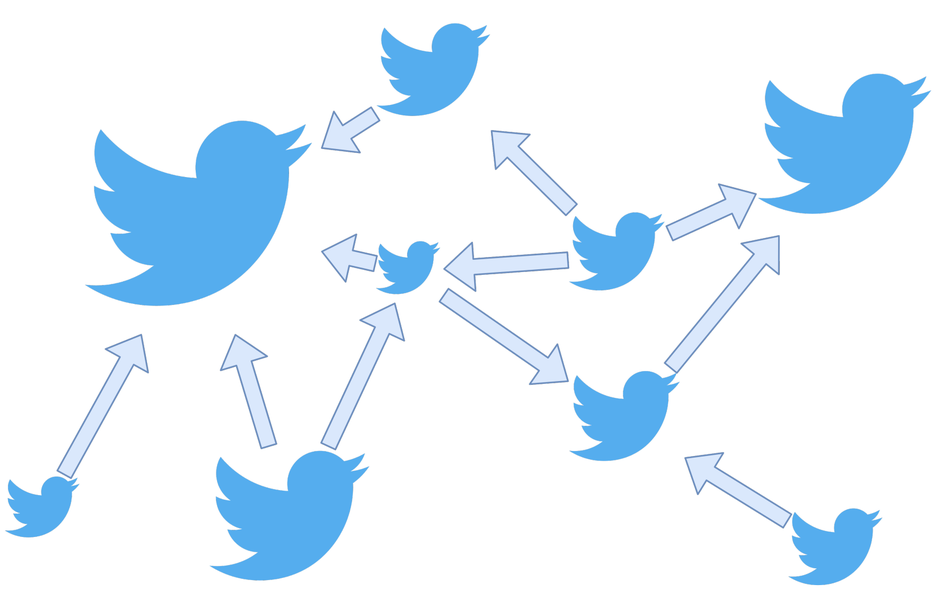
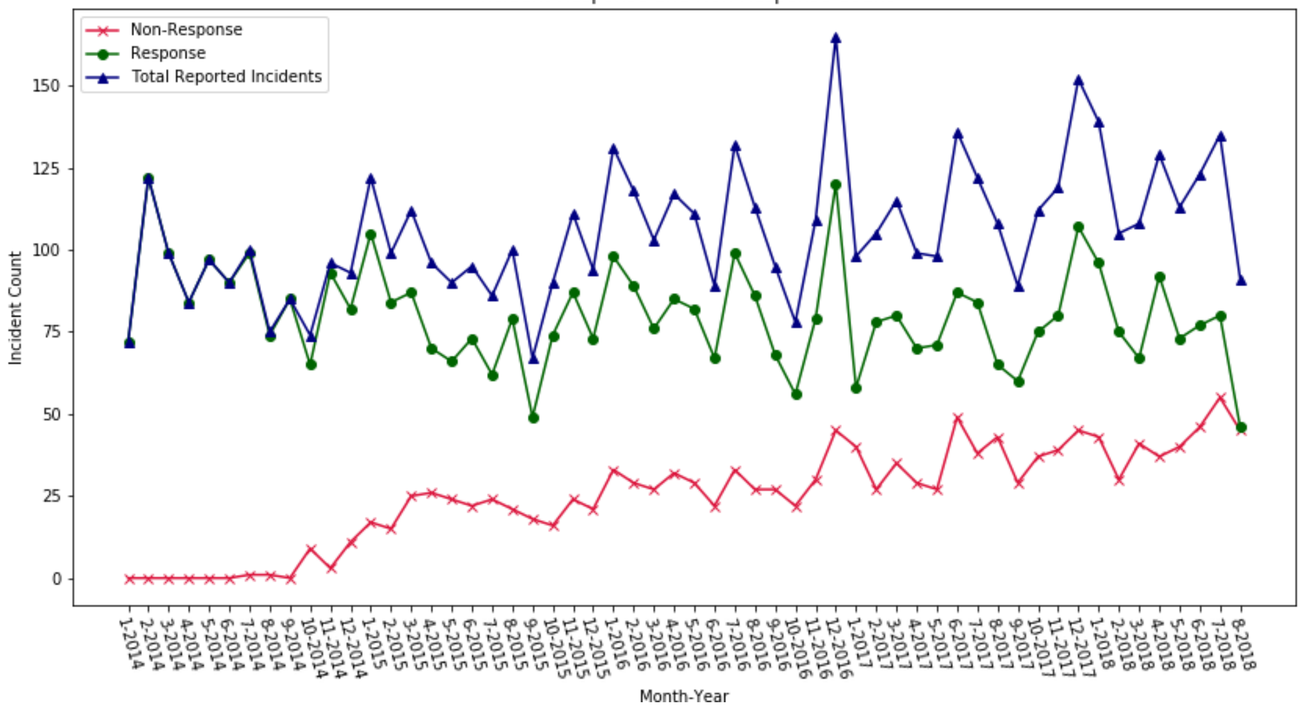
American Red Cross Analytics for Improvements: Twitter Fire Emergency Posts

Illinois Institute of Technology

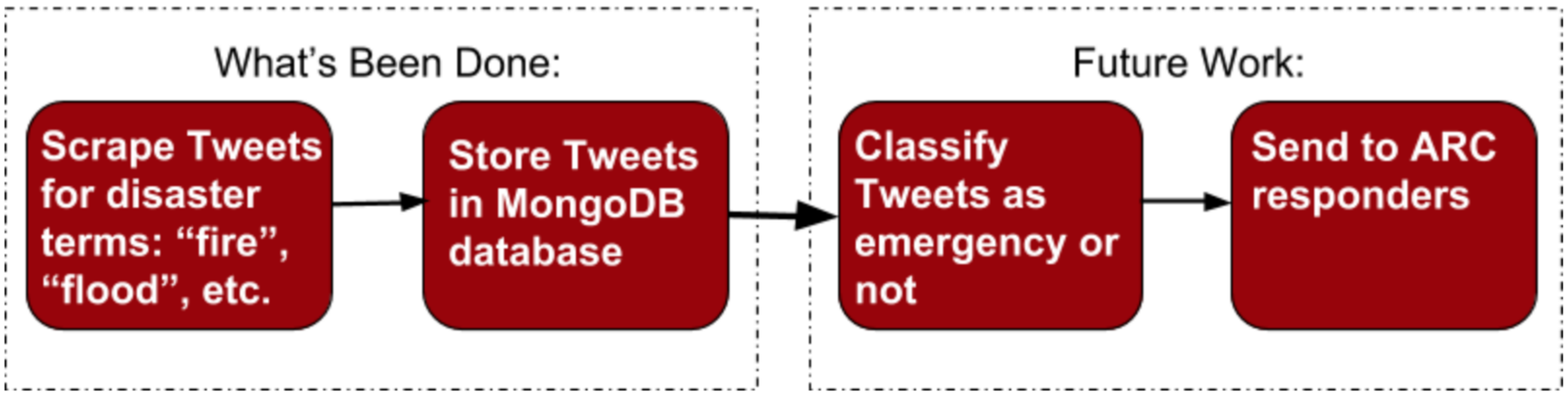
Incidents Reported to the ARC & Response Rate





Problem Statement

The American Red Cross (ARC) responds to an average of nearly 66,000 disasters every year – from a home fire affecting a single household to large emergencies affecting an entire community. Surprisingly, a lot of ARC's emergency notifications are coming from social media platforms. Currently, they are manually browsing social media posts to find reports of local fire emergencies to respond to. This method is outdated, and can cause some critical posts to be overlooked.



Process

1. Find fire-related tweets
2. Collect and analyze tweets
3. Detect tweets about an emergency
4. Send alerts to responders

Solution

Ideally, the entire process of searching for local fire emergencies and other disasters would be automated through technology. This optimizes the total amount of Tweets that can be searched through and responded to. Once the occurrence of a disaster is detected, ARC can choose how to allocate volunteers and other resources to best aid the victims.

Product

The final deliverable would be a service to aid ARC volunteers in finding new local disasters to respond to. The dispatchers would be able to type in a location, and the tool would start to pull all recent disaster-related Tweets within a user specified mileage radius. If something occurs in that region while a volunteer is on duty, an alert would be sent to the volunteers by dispatchers with disaster type and location so that resources could be allocated optimally.

Authors

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