Building an Alert System based on Police Scanners

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Problem Statement

Currently, FEMA identifies areas that require immediate attention (for search and rescue efforts) either by responding to reports and requests put directly by the public or, recently, using social media posts. This tool will utilize live police radio reports to identify hot spots representing locations of people who need immediate attention. The tool will flag neighborhoods or specific streets where the police and first-respondents were called to provide assistance related to the event.

Overview

What we wanted to do was create an alert system using data from police scanner to distribute alerts, based on location and type of alert, to subscribers via email.

Where did we source our data

Police Stations, Forums, Stringers, Scanners

Primarily Radio Report aggregators, such as Broadcastify and IncidentPage

Complementary Data

Weather Data

Earthquake/Tsunami warnings

Power Outages (not successful)

Traffic Data

Explanation of the Program

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Scraping of IPN alert ticker(IPN)

Sent to Dataframe

Alerts are run through Darksky for weather data

Distributed to emails for those who subscribe to specific alerts for type and area

The Program Itself

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Email Alert contains:

- Type, Location
- Current weather and advisories

1 Alarm Fire in Columbia, South Carolina

Alert: 1 Alarm Fire
City: Columbia
State: South Carolina
Address: 7425 Fairfield Rd
DSCR: Delayed - Heavy fire in a metal recycling center. Mult master streams in operation.

WEATHER

No Current Weather Alerts
Forecast: Clear
Nearest Storm: 116 Miles Away
Storm Direction: 42°NE degrees
Wind Speed: 6.44 MPH
Wind Gust: Up to 8.44 MPH
Wind Direction: 255°W degrees
Visibility: 10 Miles
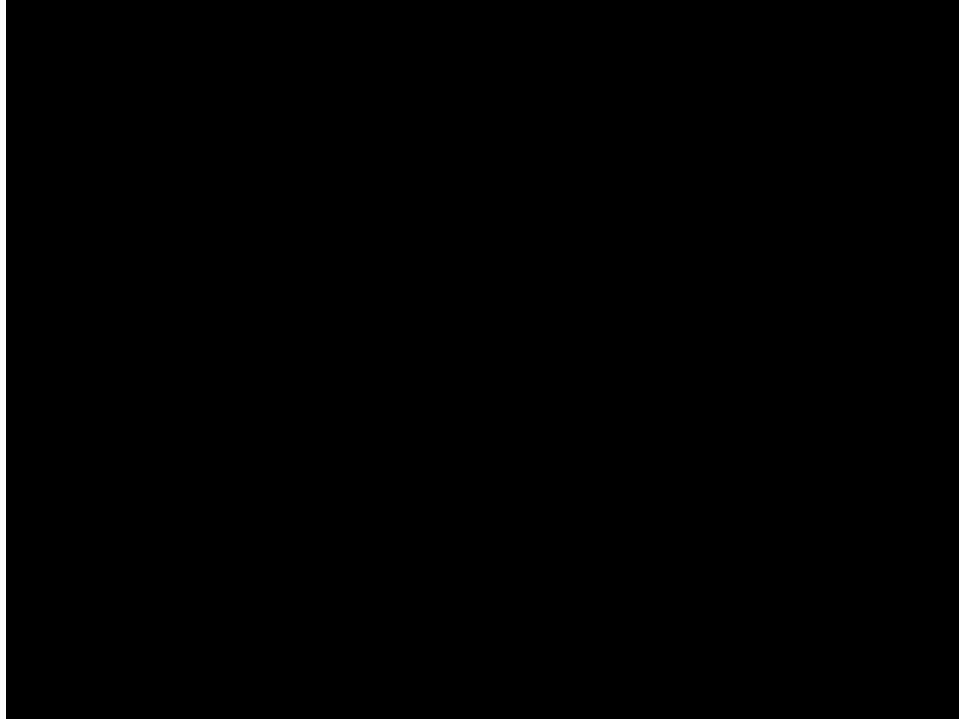Temperature: 88.97°F

Subscription Program

- Sign up with email
- Choose cities/states/provinces to be alerted for
- Choose type of alerts to sign up for
- Alerts are emailed to you

Video Demonstration

Next Steps

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- Unsubscription function, profile editing
- Speech to text functionality for alerts
- Getting more complementary data
- Build out the user interface