

# Text-to-911 Emergency Situation Deciphering

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## Domain

The first 911 call in the US was in 1968. Some 40 years later, we now have Text-to-911 services, but 911 texts are only accepted in a limited number of cities and states, which is determined by whether the 911 call centers want to accept them.

## Motivation

If we can determine the type of emergency situation and its urgency from a text, then we are one step closer to making the Text-to-911 system more reliable, automated, and likely to be adapted. The Text-to-911 system is especially useful for those that are deaf, hard of hearing, speech impaired, and for dangerous situations where someone can't talk.

## Data

The 250 text conversations are transcribed in an excel sheet from Sedgwick County Emergency Communications in Kansas. The texts are unlabeled and some of the personally identifying information is redacted.

## MVP

An MVP will consist of me classifying emergency situations using the Natural Language Processing Techniques of Topic Modeling and Clustering into clusters that make sense.

## Foreseen Difficulties

Finding clusters that make sense from the data I have.

## Nice to Haves/Future Work

I would also like to be able to use the text data and parse the texts to auto-populate any forms needed by the responders with the correct information from the text. I would like to create a chat bot that communicates with the texter to gather any other information that is needed that they didn't provide in the initial text, like location, injured parties, etc.