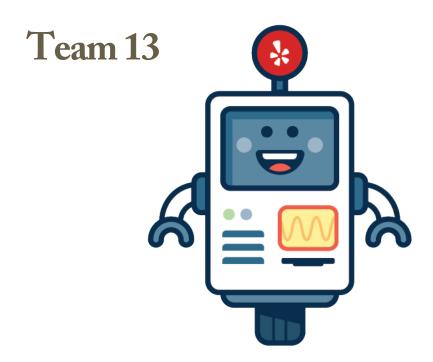
# CHATBOT

#### Restaurant Recommendation System



Arun Soundararaj
Bharath Sivaraman
Louis Arokiaraj Gilbert
Vrushali Sudhir Peshave

### What?

- A dialogue system Chatbot.
- Recommends restaurants based on user preferences
  - Cuisine
  - Location
  - Price
- Analysis of user reviews.

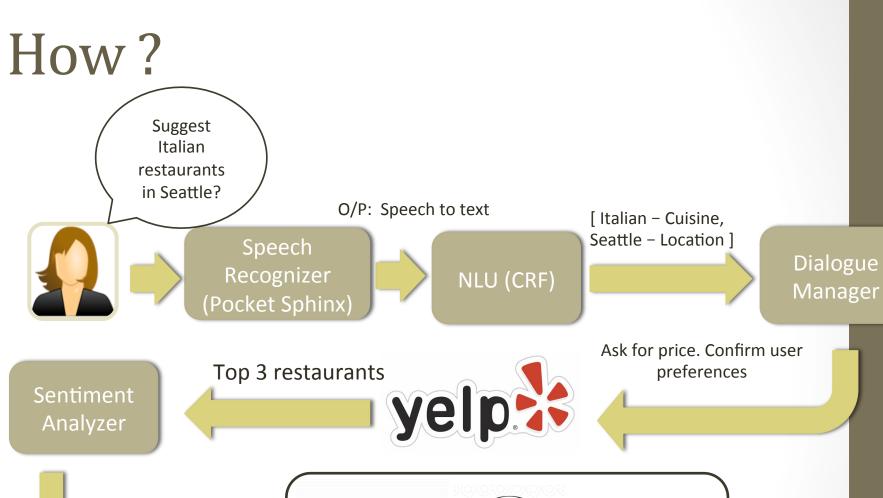
## Why?

- Cognitive assistants are the evolving technology
- Handling of multiple NLP sub tasks
- Involves Human-computer interaction





amazonalexa





### Evaluation

- Speech Recognition Word Error Rate
- Natural Language Understanding Precision and Recall
- Sentimental Analysis of reviews Precision and Recall
- Overall System's Evaluation Survey

#### **Future Enhancements**

- Text to speech
- Learning from previous chat sessions
- More user preferences
- More refined user interactions
- Performance Optimization

### A Quick Demo!

Demo Link:

https://www.youtube.com/watch?v=DWipYowZmaU

#### References

- http://ieeexplore.ieee.org/abstract/document/7041732/
- http://cmusphinx.sourceforge.net/wiki/
- http://www.chokkan.org/software/crfsuite/manual.html
- https://www.yelp.com/developers/documentation/v3
- https://github.com/nltk/nltk/wiki
- http://cs229.stanford.edu/proj2014/Yun%20Xu,
   %20Xinhui%20Wu,%20Qinxia%20Wang,
   %20Sentiment%20Analysis%20of%20Yelp's%20Ratings%20Based%20on%20Text%20Reviews.pdf