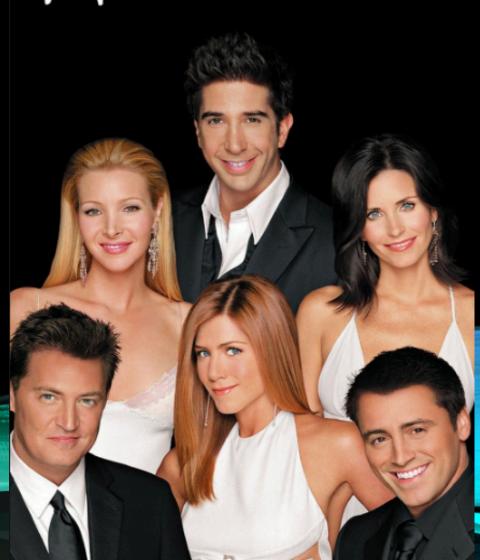
## F.R.I.E.N.D.S

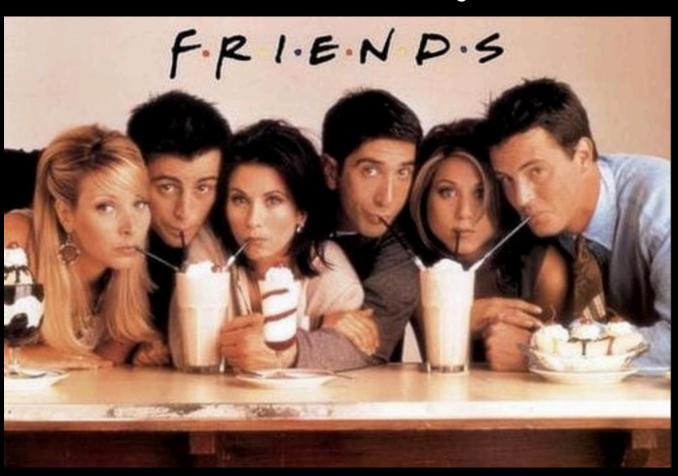
# WHAT'S MY LINE

Xuan Qi



### Objective

- Use LDA to understand main topic for each characters
- Text generator: generate dialog for the main characters.



#### DATA

Scraping dialog from 224 episode (<a href="https://fangj.github.io/friends/">https://fangj.github.io/friends/</a>)

The One Where Monica Gets a New Roommate (The Pilot-The Uncut Version)

Written by: Marta Kauffman & David Crane

Transcribed by: guineapig

Additional transcribing by: Eric Aasen

(Note: The previously unseen parts of this episode are shown in blue text.)

[Scene: Central Perk, Chandler, Joey, Phoebe, and Monica are there.]

Monica: There's nothing to tell! He's just some guy I work with!

Joey: C'mon, you're going out with the guy! There's gotta be something wrong with him!

Chandler: All right Joey, be nice. So does he have a hump? A hump and a hairpiece?

Phoebe: Wait, does he eat chalk?

(They all stare, bemused.)

Phoebe: Just, 'cause, I don't want her to go through what I went through with Carl- oh!

1.

#### Data mining

Monica: There's nothing to tell! He's just some guy I work with!

Joey: C'mon, you're going out with the guy! There's gotta be something wrong with him!

Chandler: All right Joey, be nice. So does he have a hump? A hump and a hairpiece?

Phoebe: Wait, does he eat chalk?

(They all stare, bemused.)

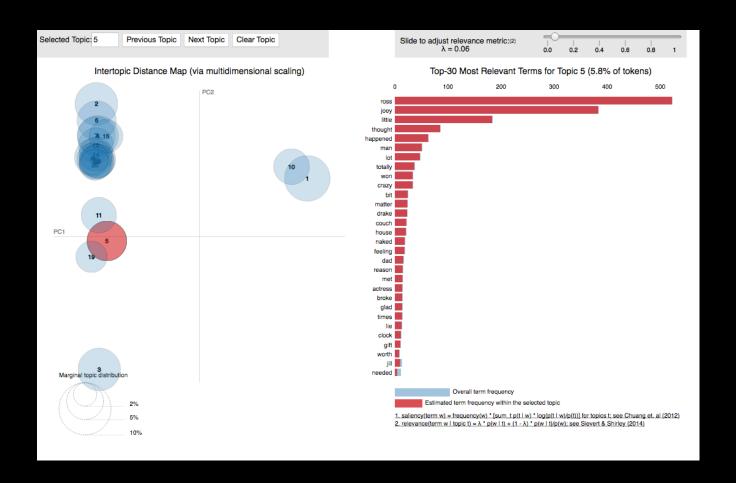
#### Separate expressions with dialog.



diag expression diag\_filt Wait, does he eat chalk?, Just, 'cause, I don... Wait, does he eat chalk?, Just, 'cause, I don... She starts to pluck at the air just in front o... Phoebe: Oh God Monica hi! Thank God! I just went to y... to the waitress that brought her coffee to Mon... Oh God Monica hi! Thank God! I just went to y... Rachel: (mortified) Hi., I just feel like someone reac... nortified,in a deep voice,choked voice,normal .. Hi., I just feel like someone reached down my... Ross: There's nothing to tell! He's just some guy I... explaining to the others, to Ross, pointing at R... There's nothing to tell! He's just some guy I... Monica: All right Joey, be nice. So does he have a hu... They all stare at him.,He extends his hand hop... All right Joey, be nice. So does he have a hu... Chandler: C'mon, you're going out with the guy! There's... comforting her, picking up a leftover part, look... C'mon, you're going out with the guy! There's... Joey:

#### LDA

• WILL PRESENT SOME RESULTS ON LDA, SOMETHING SIMILAR TO THE PICTURE ON THE LEFT SIDE. HAVE SOME PRELIMIARY RESULTS, NEED TO TRIM THE MODEL A BIT.



#### Text generator

"I was, fourteen. My mom had just killed herself and my step-dad was back in prison, and I got here, and I didn't know anybody. And I ended up living with this, albino guy who was, like, cleaning windshields outside port authority and then, he killed himself, and then I found aromatherapy. So believe me, I know exactly how you feel"



#### Character to integer

```
{' ': 0, ',': 1, '-': 2, '.': 3, 'A': 4, 'I': 5, 'M': 6, 'S': 7, 'a': 8, 'b': 9, 'c': 10, 'd': 11, 'e': 12, 'f': 13, 'g': 14, 'h': 15, 'i': 16, 'j': 17, 'k': 18, 'I': 19, 'm': 20, 'n': 21, 'o' : 22, 'p': 23, 'r': 24, 's': 25, 't': 26, 'u': 27, 'v': 28, 'w': 29, 'x': 30, 'y': 31, ''' : 32}
```

#### Text generator

"I was, fourteen. My mom had just killed herself and my step-dad was back in prison, and I got here, and I didn't know anybody.

Sequence length: 100 [190298251...] Reshape M samples  $\begin{bmatrix}
 19 & \cdots & 25 \\
 \vdots & \ddots & \vdots \\
 36 & \cdots & 0
\end{bmatrix}
\begin{bmatrix}
 0 & \cdots & 27 \\
 \vdots & \ddots & \vdots \\
 33 & \cdots & 6
\end{bmatrix}
\begin{bmatrix}
 29 & \cdots & 26 \\
 \vdots & \ddots & \vdots \\
 31 & \cdots & 4
\end{bmatrix}$ Time Steps

Features (Sequence length)



Model

### Text generator

LSTM

Dropout 0.2

Dense

Compile

Model

• 200 epoch

• Still under training in AWS. Will present final results for at least 1 character

## CONCLUSION

# THANK YOU

QUESTIONS?