Ted Talk Transcript Analysis

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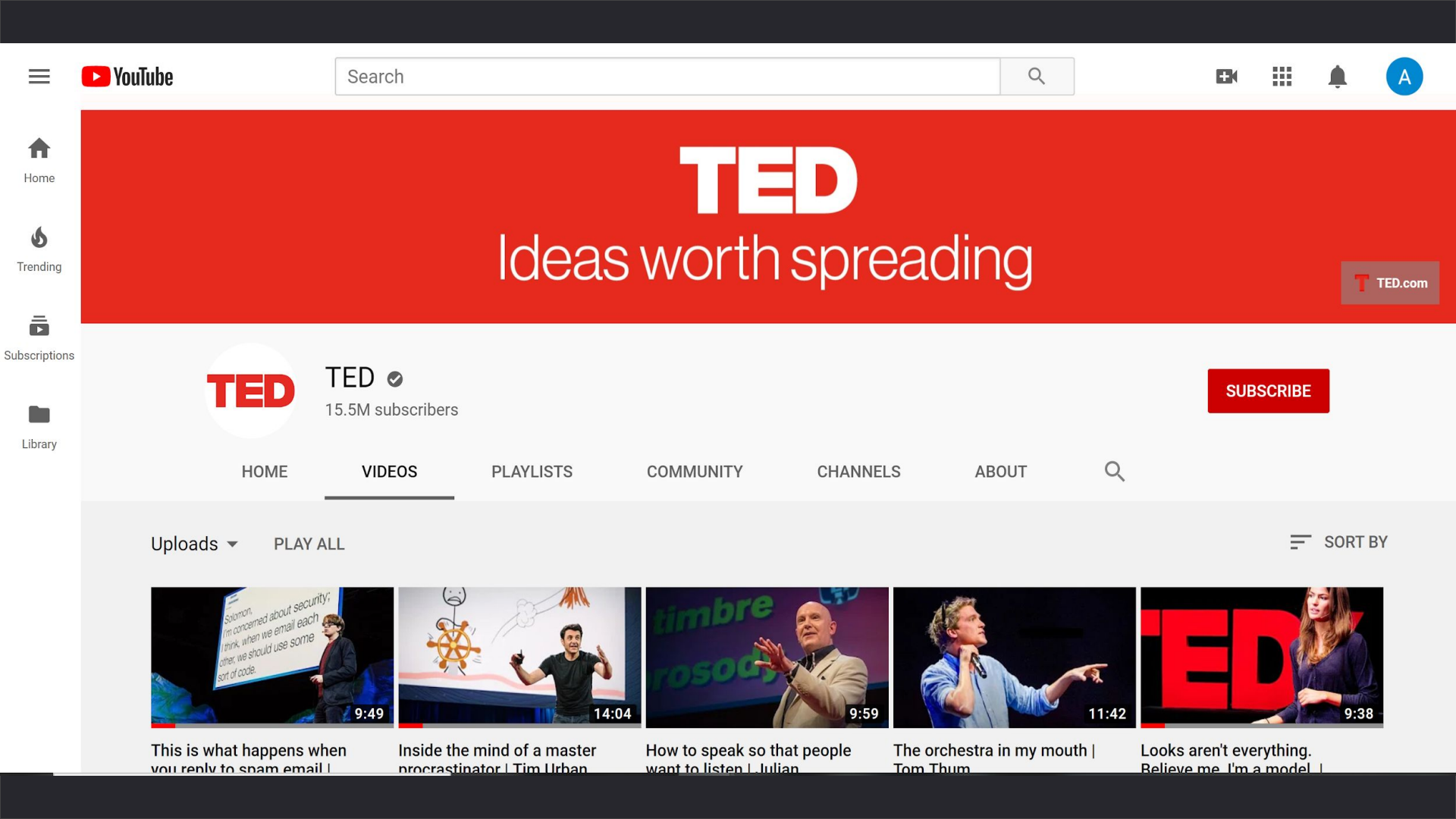
USO
JOINING FORCES
SEAL OF THE PRESIDENT OF THE UNITED STATES

Problem Statement

- What makes Ted Talk speeches popular and influential?

1.
Scraping and Cleaning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Solomon, I'm concerned about security; I think, when we email each other, we should use some sort of code.
9:49
This is what happens when you reply to spam email |
14:04
Inside the mind of a master procrastinator | Tim Urban
timbre
9:59
How to speak so that people want to listen | Julian
11:42
The orchestra in my mouth | Tom Thum
9:38
Looks aren't everything. Believe me, I'm a model. |

Details About the talk | **Transcript** 2 languages | **Footnotes** Notes + references | **Comments (13)** Join the conversation

English

00:12 It's April of 2007, and Jon Corzine, the Governor of New Jersey, is in this horrific car accident. He's in the right front passenger seat of this SUV when it crashes on the Garden State Parkway. He's transported to a New Jersey trauma center with multiple broken bones and multiple lacerations. He needs immediate surgery, seven units of blood, a mechanical ventilator to help him breathe and several more operations along the way. It's amazing he survived. But perhaps even more amazing, he was not wearing a seat belt. And, in fact, he never wore a seat belt, and the New Jersey state troopers who used to drive Governor Corzine around used to beg him to wear a seat belt, but he didn't do it.

What inspires you?
Tell us your interests and we'll pick TED Talks just for you.
Get Started
A new perspective | Ideas for self-improvement | Insights about issues tha
Nature | Smart entertainment | Inspiration or motivation | Design
Collaboration | Personal growth | Science | Innovation | A sense of
Child development | Activism | Communication | Technology

Watch next | Your list

How to change your behavior for the better
1.1M views
15:13

What Americans agree on when it comes to health
1.7M views
12:56

What if we paid doctors to keep people healthy?
1.5M views
10:40

Perspective is everything
2.7M views
18:24

2.
Topic Modeling

Approach

- SKLearn Decomposition Latent Dirichlet Allocation
- Tokenization and Count Vectorization
- 4 topics per transcript
- 4 top words per topic
  - Heavier weighted words appeared in multiple topics

Challenges

- Sarcasm
- Lack of Spoken Words
- Repetition

Some topics made sense, and some didn’t.

Results

“The Orchestra in my Mouth”

- Professional beatboxer
- Topics given:
  - Ladies
  - Gentleman
  - Voice
  - Brisbane

“This is what happens when you reply to spam email”

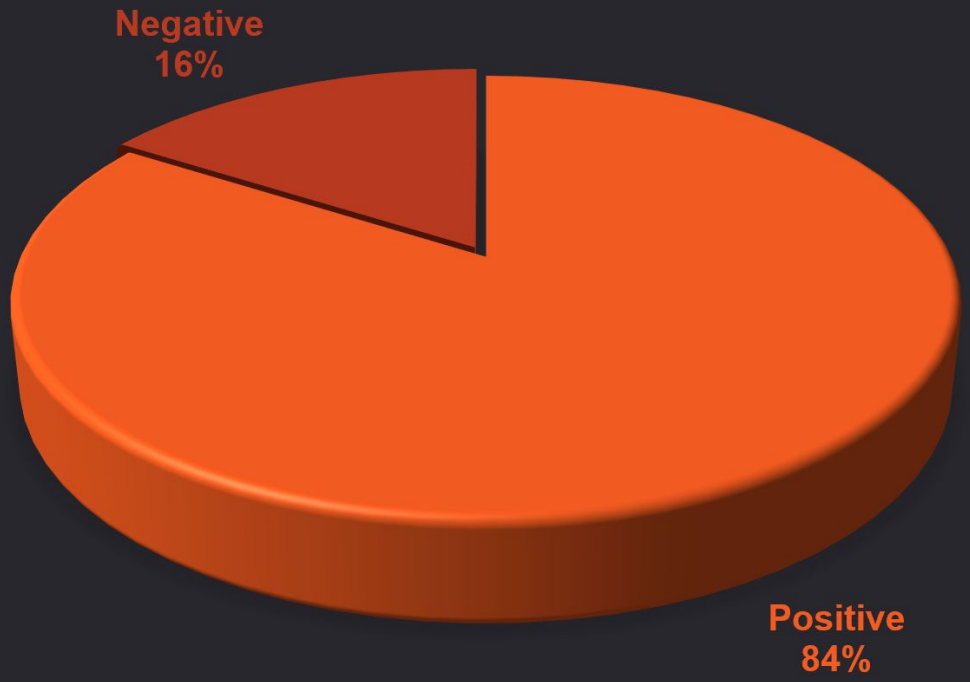
- Heavy Sarcasm
- Topics given:
  - Email
  - Solomon
  - Gummy

“How to speak so that people want to listen”

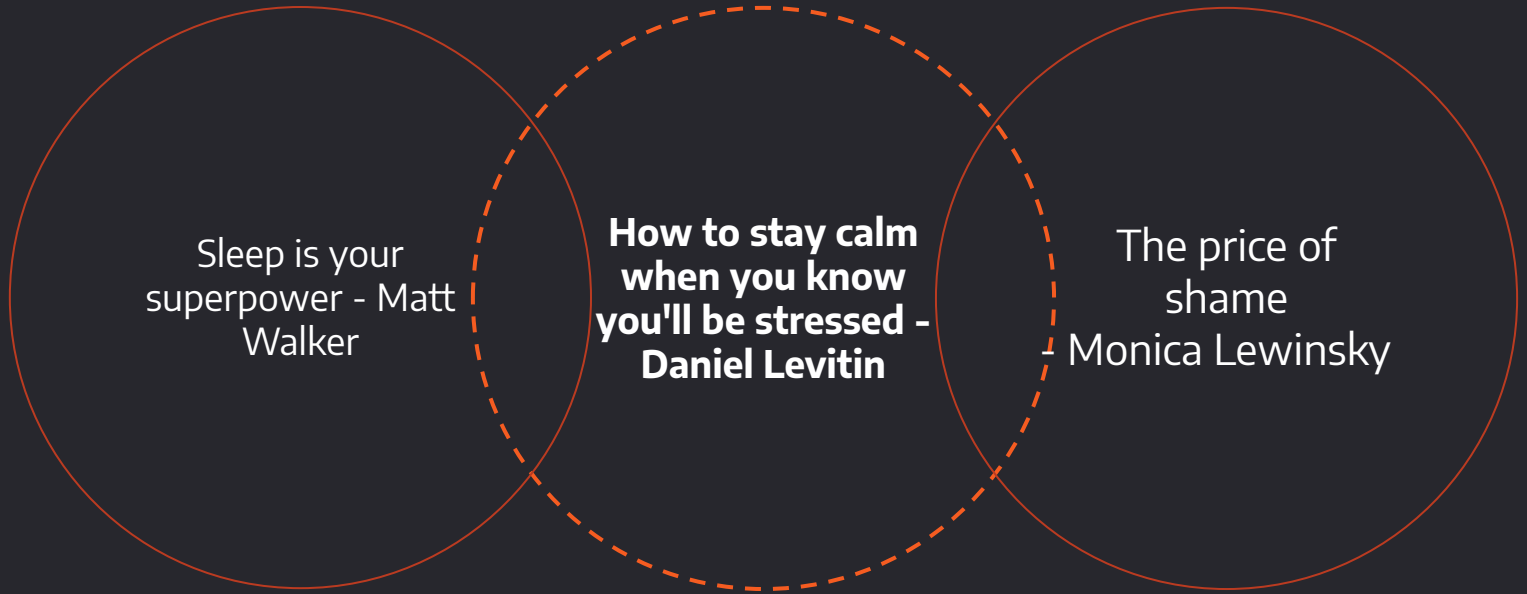
- Speech about speaking
- Topics given:
  - Voice
  - Prosody
  - Consciously
  - Listen

3.
Sentiment Analysis

Sentiment Overview

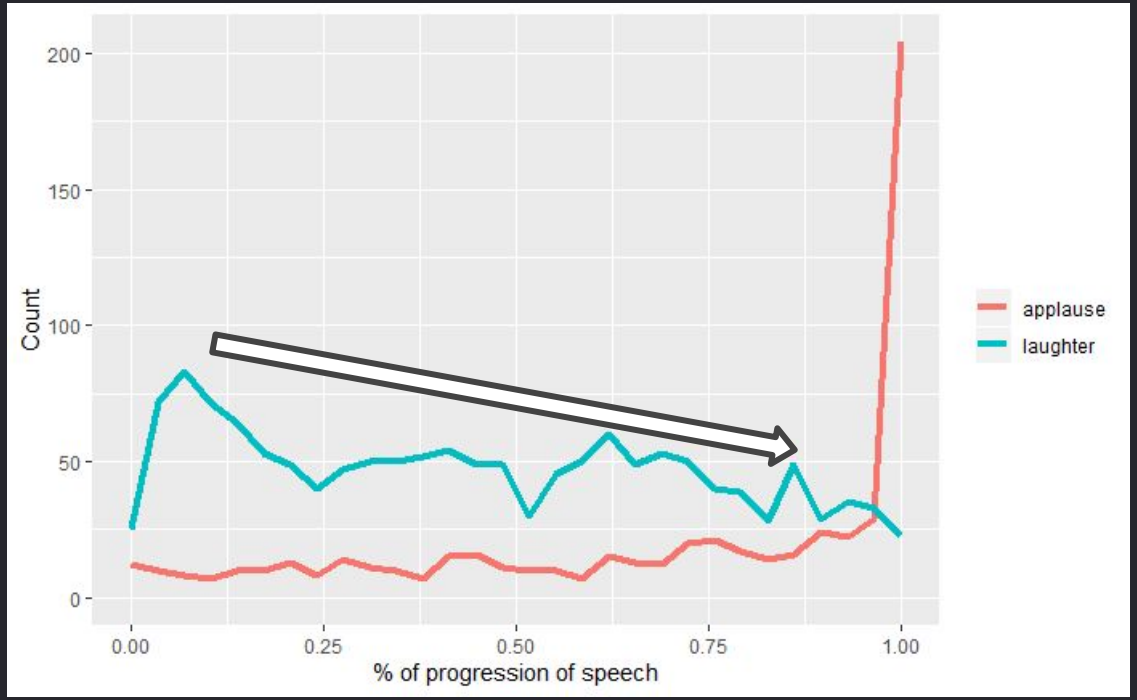


Negative TED Talks Examples



Applause and Laughter during Ted Talks

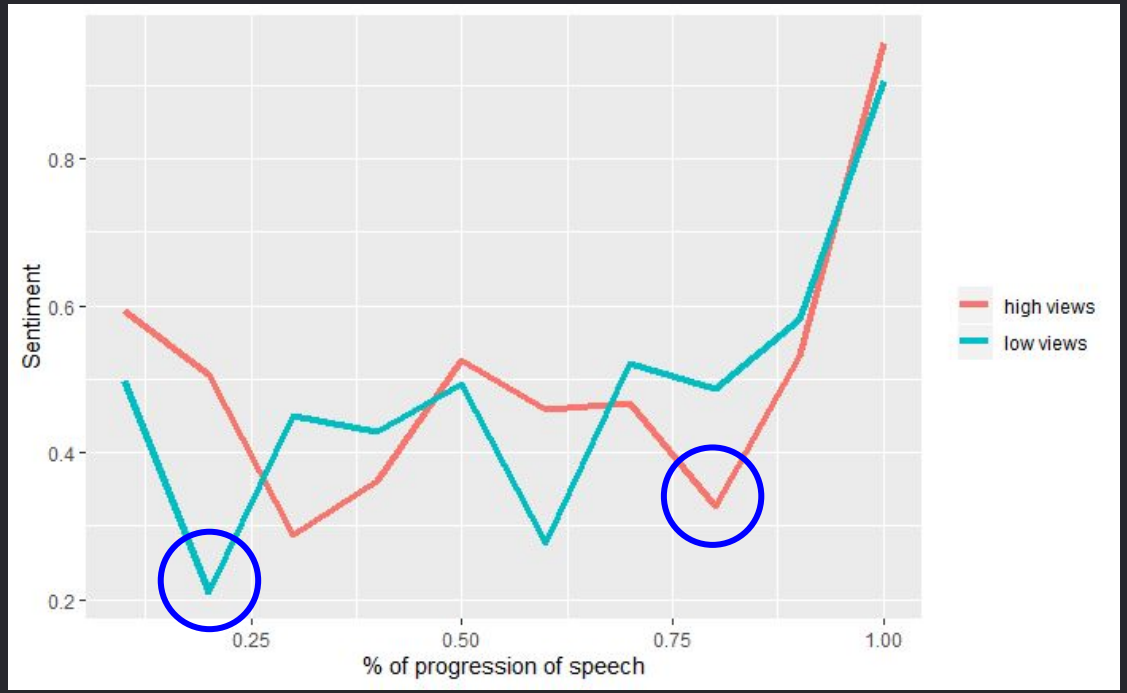
As time passes during the talk, the number of **laughter decreases**



Sentiment change during Ted Talks

More popular talk has a **decrease** in sentiment before ending

Less popular talk has a **decrease** in sentiment after beginning



4.
Findings and Results

What makes a popular speech?

THANKS!

ANY QUESTIONS?