WHAT TO VISIT NEXT?

AN EXPLORATION IN THE UNIVERSE OF TED TALKS

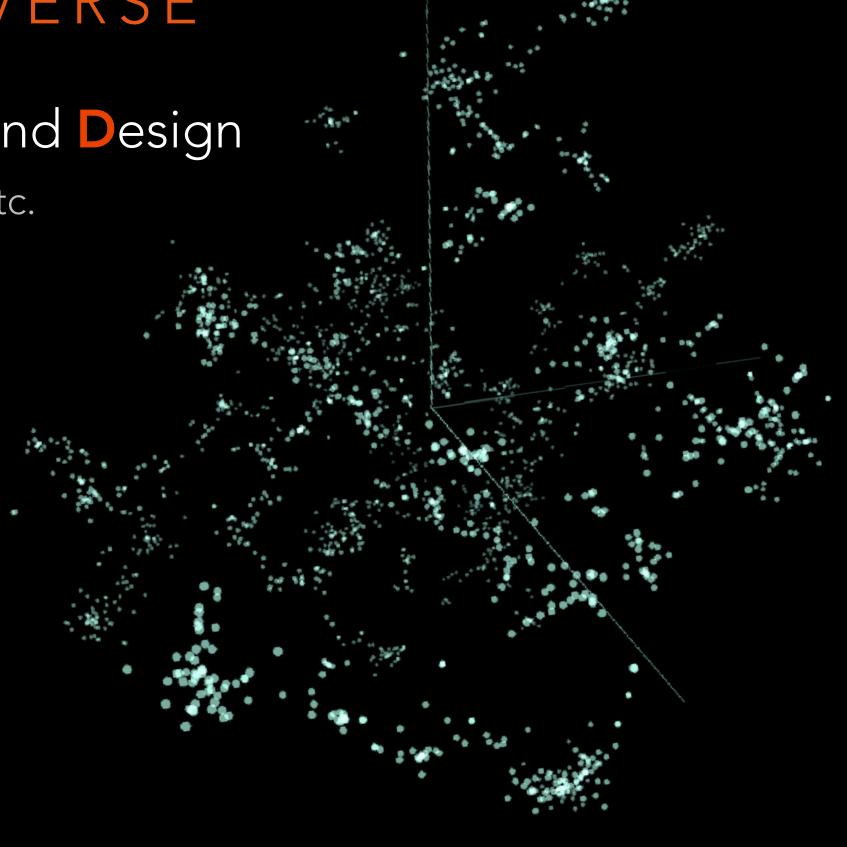
YOUR PILOT: MAN LIANG

THE "TED" UNIVERSE

Technology, Entertainment and Design

+ Business, Science, Global Issues, etc.

"Ideas worth spreading"



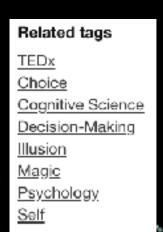


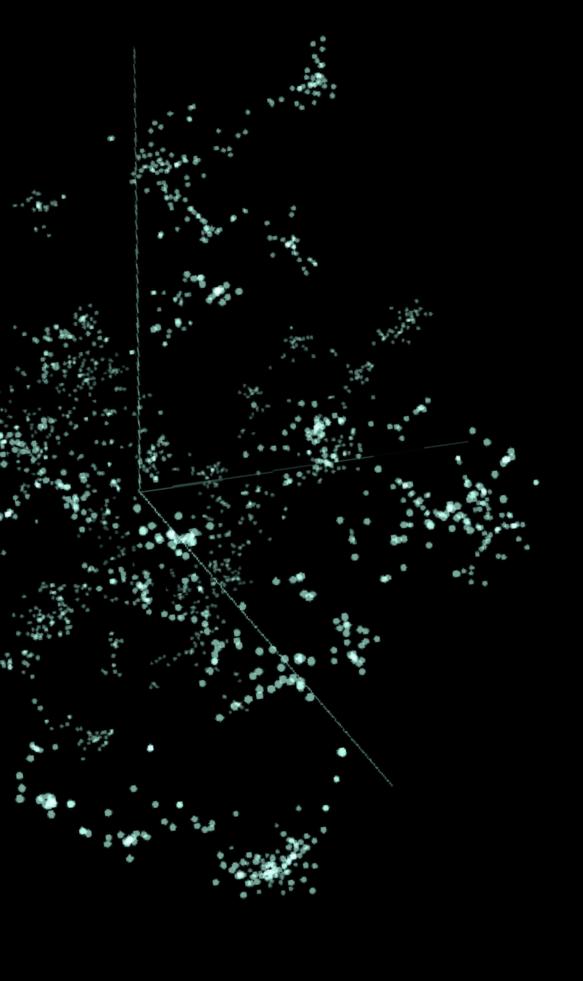
Technology, Entertainment and Design

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THE "TED" UNIVERSE

Technology, Entertainment and Design

+ Business, Science, Global Issues, etc.

"Ideas worth spreading"

Topics

Related tags

TEDx

Choice Cognitive Science

Decision-Making

Illusion

<u>Magic</u>

<u>Psychology</u>

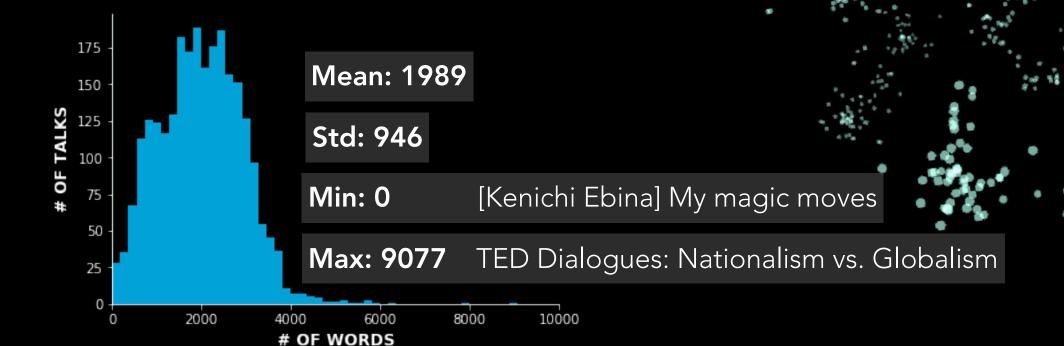
Self Activism Animation Augmented reality Biosphere Addiction Antarctica Autism spectrum Biotech disorder Adventure Anthropocene Birds Bacteria Advertisina Anthropology Blindness Beauty Africa Blockchain Ants Bees Aging Apes Body language Behavioral Agriculture Archaeology Book economics Books Architecture Big bang AIDS Botany Big problems Aircraft Arts Brain Biodiversity Brand Algorithm Asia Bioethics Brazil Alternative energy Asteroid Biology Buddhism Alzheimer's Astrobiology Biomechanics Ancient world Astronomy Bullying Biomimicry Animals Atheism Business



THE "TED" UNIVERSE

2524 FULL TRANSCRIPTS (KAGGLE + TED.COM)

WIDE RANGE OF LENGTH



PREPARATION

Good morning. How are you?
(Laughter) It's been great, hasn't it? I've been blown away by the whole thing. In fact, I'm leaving.
(Laughter) There have been three themes running through the conference which are relevant to what I want to talk about. One is the extraordinary evidence of human creativity in all of the presentations that we've had and in all of the people here.

CLEAN-UP

LOWERCASE

REMOVE

audience reaction non-alphabetic characters

ADD

missing spaces

LEMMATIZE

blown away by the whole thing. in fact im leaving. there have been three theme running through the conference which are relevant to what i want to talk about. one is the extraordinary evidence of human creativity in all of the presentation that weve had and in all of the people here.

. . .

PREPARATION

VECTORIZE

```
Count Vectorizer [ 2524 x 2000 ]

n_features = 2000 (1000~2000)
max_df = 0.3 (0.1~0.99)
min_df = 5 (1~20)
n_gram = 1 (1~3)

TF-IDF Vectorizer [ 2524 x 2000 ]
```

DIMENSION REDUCTION

 $\left[\begin{array}{c} 2524 \times 2000 \end{array}\right]$

of topics (20~150)

2524 × 50

Count Vectorizer

LDA

Latent Dirichlet Allocation

TF-IDF Vectorizer

LSA (truncatedSVD)

Latent Semantic Analysis

NMF

Non-negative Matrix Factorization

DIMENSION REDUCTION

TOPIC COHERENCE SCORE

~ mean(pairwise cosine similarity)

WORD2VEC

Score Topic Example

0.80 girl boy father daughter parent sister mother village brother

0.57 city design cancer patient cell car architecture street neighborhood space

0.46 space refugee project oil song choice water election voice fly

0.60

NMF

0.51

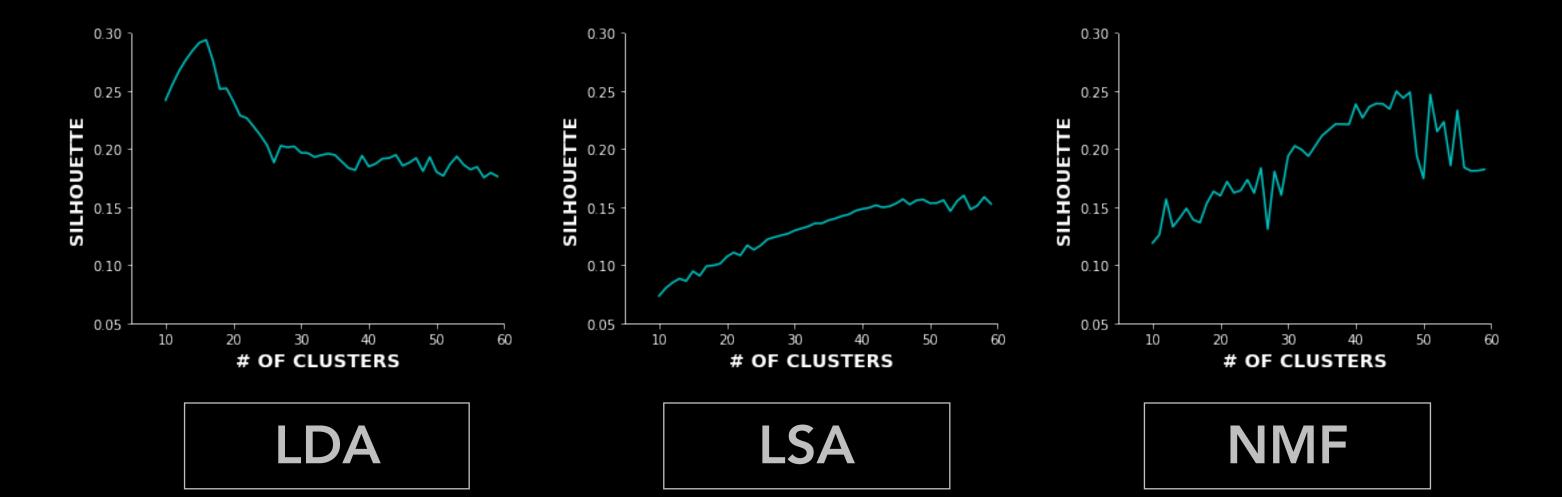
LSA

0.68

LDA

DIMENSION REDUCTION

K-Means



Sample talk: A prosthetic arm that "feels"

Sample talk: A prosthetic arm that "feels"

TED.COM

My 12 pairs of legs
Luke, a new prosthetic arm for soldiers
The potential of regenerative medicine
The mystery of chronic pain
The emotion behind invention
3 clues to understanding your brain

LDA

The new bionics that let us run, climb and dance
The rise of personal robots
My simple invention, designed to keep my grandfather safe
A robot that runs and swims like a salamander
How a fly flies
Simple hacks for life with Parkinson's

NMF

A science award that makes you laugh, then think

The riddle of experience vs. memory

How to get (a new) hip

Strange answers to the psychopath test

On the virtual dissection table

My son was a Columbine shooter. This is my story

LSA

The emotion behind invention
Luke, a new prosthetic arm for soldiers
The sore problem of prosthetic limbs
3 clues to understanding your brain
My wish: Three unusual medical inventions
There are no scraps of men

Sample talk: Averting the climate crisis

TED.COM

New thinking on the climate crisis
The business logic of sustainability
The state of the climate — and what we might do about it
A climate solution where all sides can win
Climate change is happening. Here's how we adapt
Why climate change is a threat to human rights

LDA

How behavioral science can lower your energy bill
Better toilets, better life
What I discovered in New York City trash
No roads? There's a drone for that
The magic washing machine
Transition to a world without oil

NMF

A clean energy proposal -- race to the top!

My solar-powered adventure

High-altitude wind energy from kites!

A critical look at geoengineering against climate change

A climate solution where all sides can win

A small country with big ideas to get rid of fossil fuels

LSA

A climate solution where all sides can win
New thinking on the climate crisis
Why climate change is a threat to human rights
Salvation (and profit) in greentech
Climate change is happening. Here's how we adapt
A critical look at geoengineering against climate change

Sample talk: My year of saying yes to everything

TED.COM

Your elusive creative genius
How to use data to make a hit TV show
Should you live for your résumé ... or your eulogy?
How to find a wonderful idea
Fashion and creativity
Play is more than just fun

NMF

The art of misdirection

What I learned as a kid in jail

Flow, the secret to happiness

Can you really tell if a kid is lying?

A philosophical quest for our biggest problems

Life's third act

LDA

Fiddling in reel time
On tennis, love and motherhood
A hilarious celebration of lifelong female friendship
Please don't take my Air Jordans
An ode to envy

One woman, five characters, and a sex lesson from the future

LSA

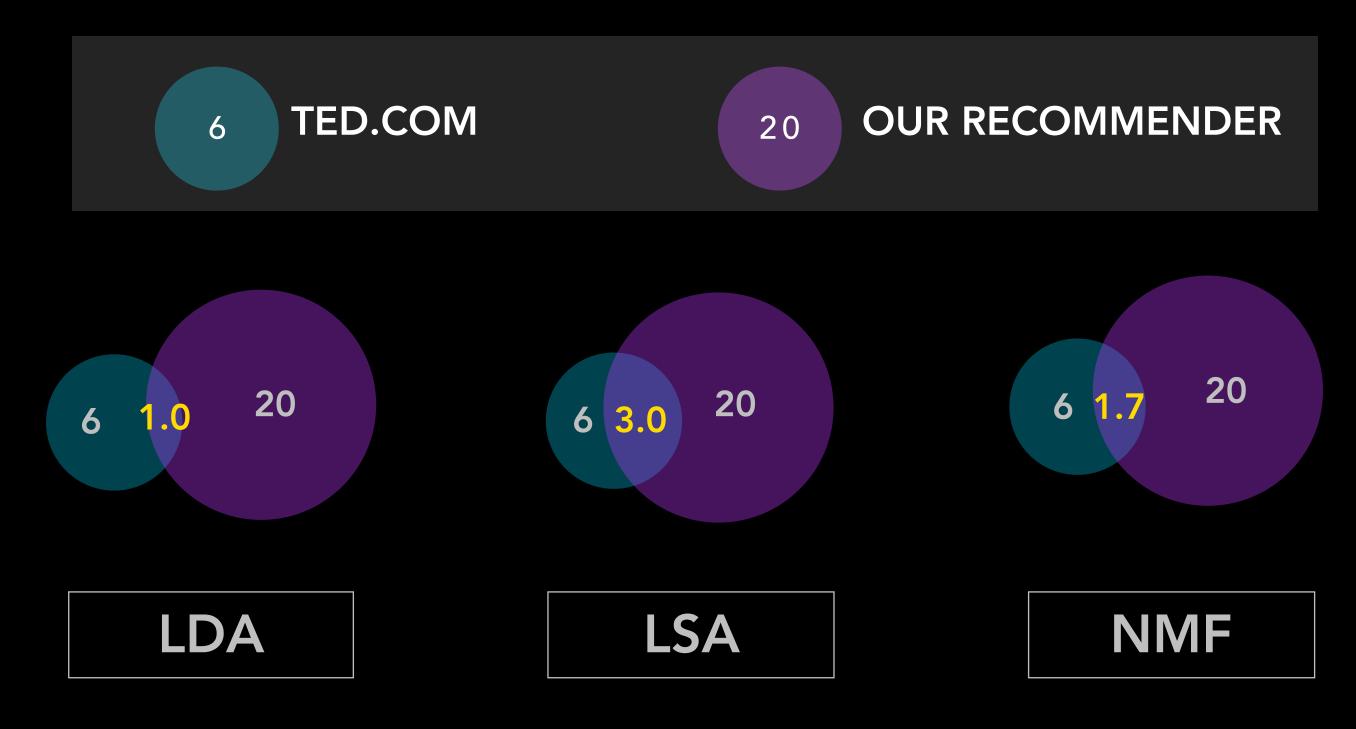
On tennis, love and motherhood Play is more than just fun

The joyful tradition of mountain music

A manifesto for play, for Bulgaria and beyond

Fiddling in reel time

Lessons from past presidents



Random chance: 0.05

FROM 50-D TO 3-D

- PCA
- T-SNE

GO TO DEMO

