# Charity Bot

A Bot That Recommends Charities Relevant to Reddit Posts

## The Other Side of Social Media

- Subreddit where interactions/questions are encouraged/prerequisite
- Questions on how to help/contribute are common



I am Kailee Scales, Managing Director for Black Lives Matter. Ask me anything.

#### **Newsworthy Event**

[-] agentdanascullyfbi Moderator 3505 points 3 days ago

For those who can't physically protest and may not be able to financially donate to many causes, what is the most important thing we can do to be supporting the BLM movement?

permalink embed save reply

← [-] kaileescales [S] 5549 points 3 days ago 🍪 🍪

I really appreciate this question, not everyone can be on the front lines. I think staying vigilant on the road to

## Many Similar Examples

#### IamA homeless person AMA!

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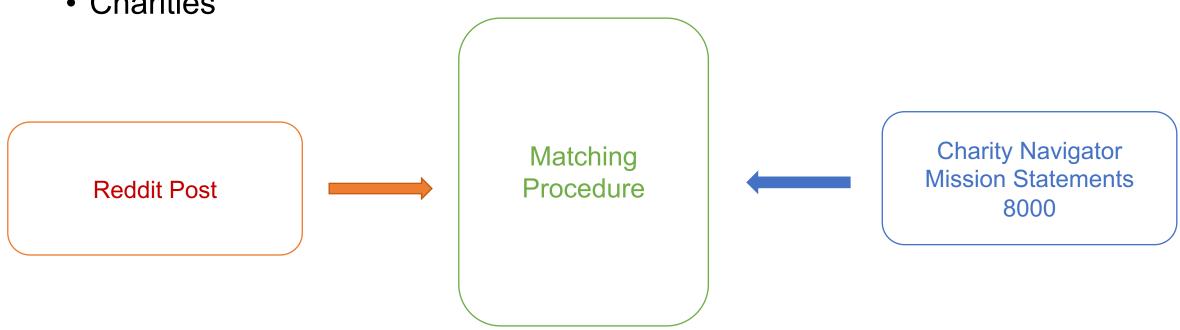
submitted 6 hours ago by OceanWidePuddleDeep

NOAH SWARTZ 439 points 5 years ago comment What do you feel can be done to help other activists who have been imprisoned (such as Barrett Brown, Chelsea 1.:) Manning, and to a lesser extent Jeremy Hammond), and how do you feel about the government using laws like the CFAA to silence these types of activists while simultaneously trying to extend its reach by citing recent hackings against US corporations (e.g. Sony)? permalink embed save What if you aren't in the US? I would feel better if \ Edit: What can I do if I live outside of the US? i have a mat inside. ugh! Thank you for Im not going to accep permalink embed save that. We quite literally [-] newboy97 114 points 2 years ago Came here to ask this. I'm not American. Should I care and if so, how can I help? FCC just voted to kill Net permalink embed save parent Press & friends, AMA **GAURAV LAROIA** NON-PROFIT / PHILANTHROPY submitted 2 years ago \* by FPGauravLaroia [-] **Sinow**\_ 1666 points 2 years ago As a run-of-the-mill American citizen, what can I do to help at this point?

## Bot: Suggest Relevant Charities

Bot: When invoked (!charitybot)

Charities



Demonstration



## Matching Procedures

- Starting Point:
  - TFIDF Cosine Similarity
  - Subjectively: Matching Well

**Tests** 

### **Tests**

### Sample Mission Statement

• "Founded in 1952, the Arizona-Sonora Desert Museum is dedicated to the conservation of the Sonoran Desert. Its mission is to inspire people to live in harmony with the natural world by fostering love, appreciation, and understanding of the Sonoran Desert."

#### • If user writes:

• How do I contribute to a "Museum [that] is dedicated to the conservation of the Sonoran Desert."

## Tests Approach

Take mission statement (orgID: 9731)

"Founded in 1952, the Arizona-Sonora Desert Museum is dedicated to the conservation of the Sonoran Desert. Its mission is to inspire people to live in harmony with the natural world by fostering love, appreciation, and understanding of the Sonoran Desert."

Museum is dedicated to the conservation of the Sonoran Desert

Mission Statement orgID: 1

Mission Statement orgID: 2

...

Mission Statement orgID N

orgID: 9731

#### **Lack of Detail**

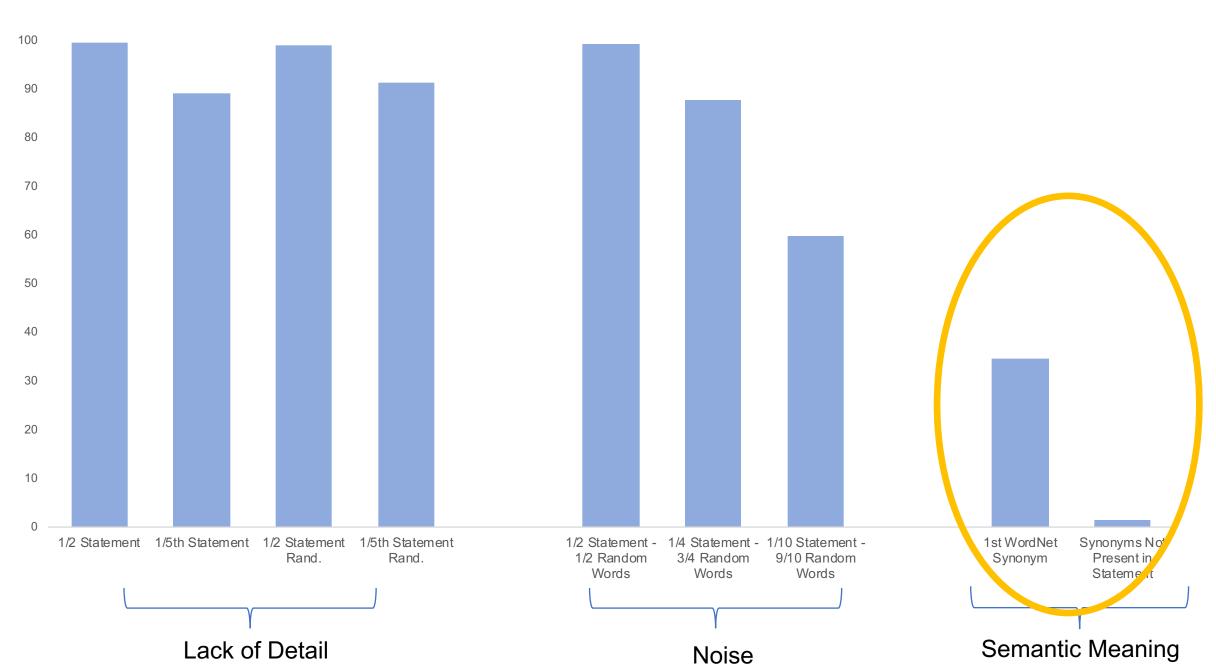
Founded in 1952, the

Noise

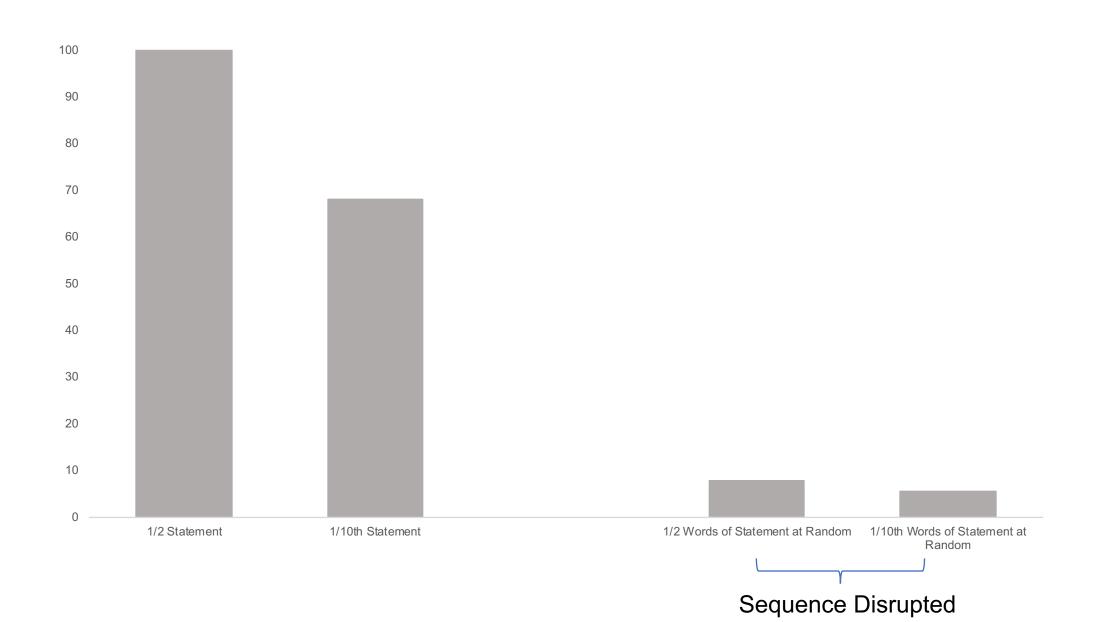
**Semantic Meaning** 

Equipped in 1952, the Arizona-Sonora Desert Museum is dedicated to the established of the affecting arid by the established of the affecting arid owned aim abide directed toward affecting care about affecting world owned aim abide directed toward affect form and community in the tatural world owned aim abide appreciation, and community along affecting common earth aside advance admire acknowledgment along with compassionate about affecting arid

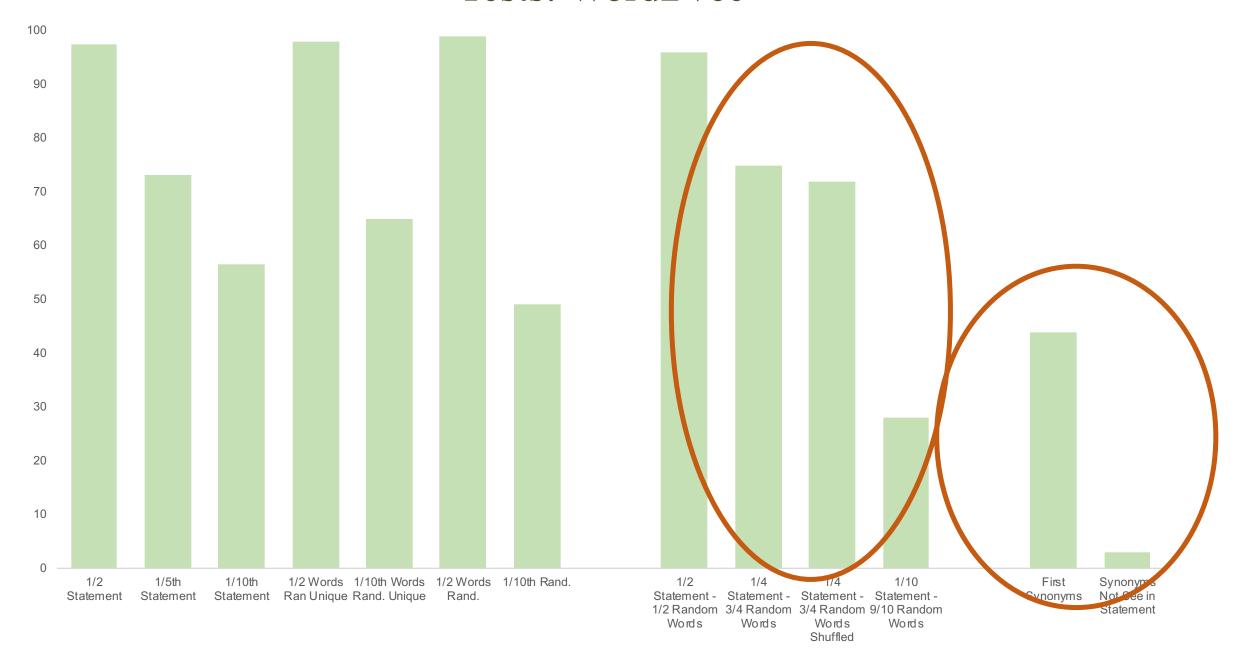
Tests: TFIDF



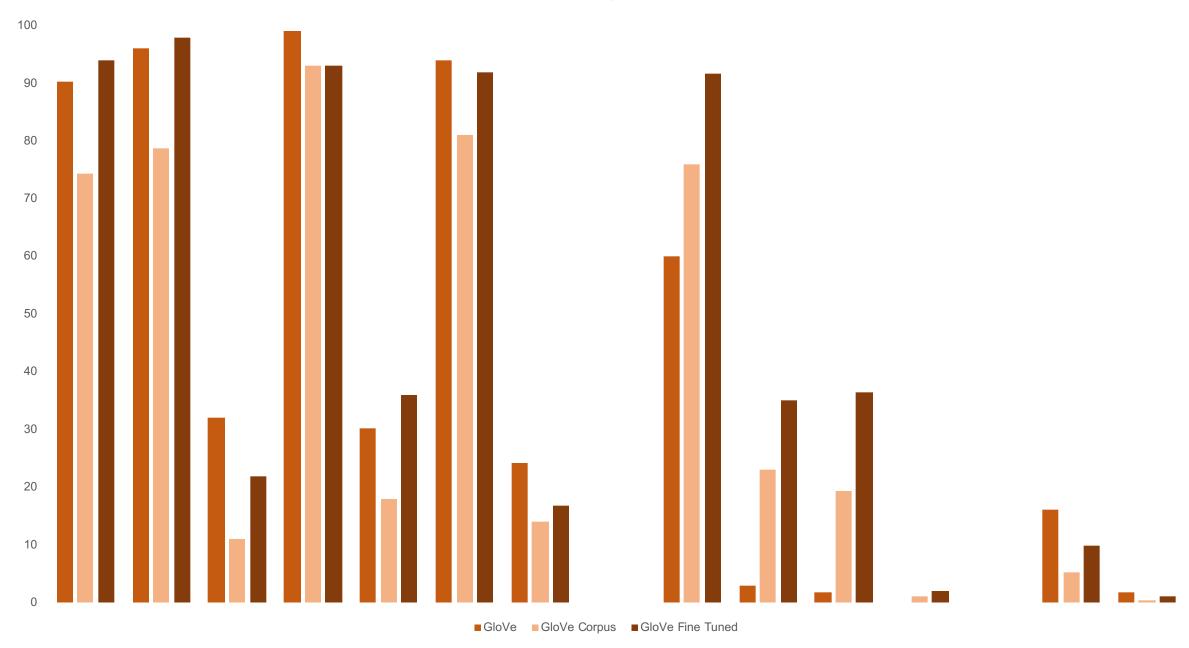
Tests: BERT



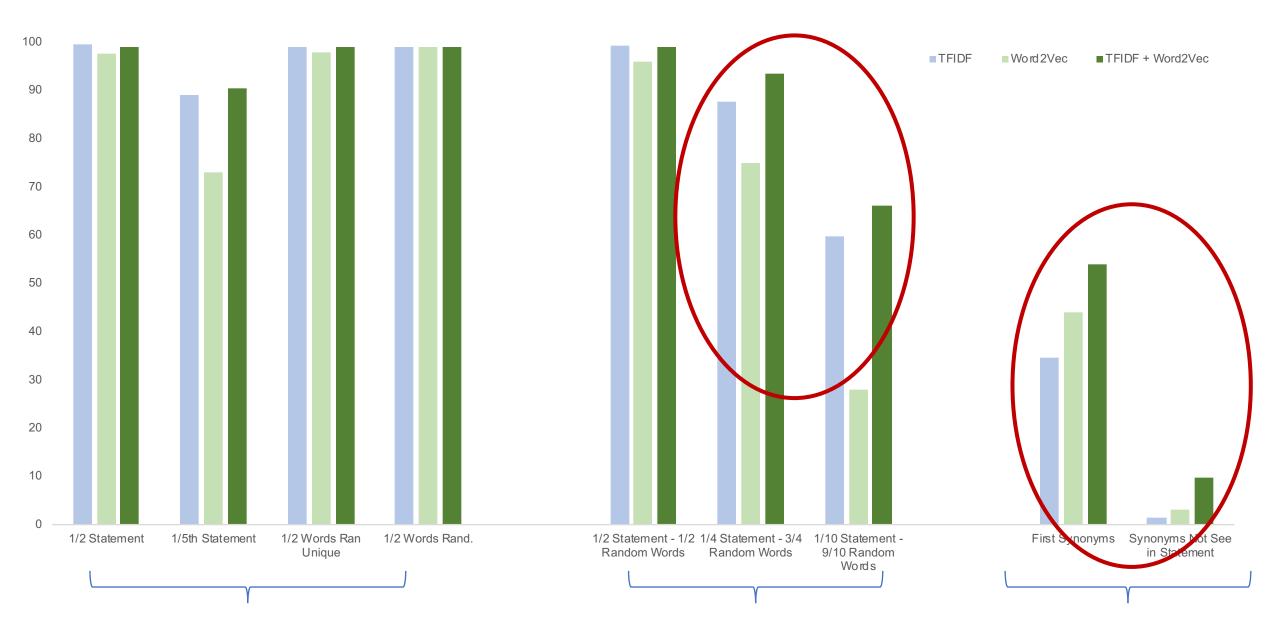
Tests: Word2Vec



Tests: GloVe



### Tests: TFIDF + Word2Vec



Lack of Detail Noise Semantic Meaning

## In Practice: Quality & Relevance

10 Posts: Charity Recommendation (Indexed Charities)

Average Rating (Evaluation Scale Charity Navigator 0-100):

• Comment: 75

• Bot: 90

#### Average Time:

Comment: 153 minutes

Bot: 5 Seconds

#### Relevance:

Subjective Evaluation

• Comment: 72%

• Bot: 82%

### About Me

• BA in Economics

- MSc in Philosophy & Public Policy
- PhD in Philosophy: Research Reproducibility
  - Cognitive Evolution Lab
  - Non-Replications
  - Problems & Solution



