Topics Rob

1. Diachronic/Bilingual word2vec for normalization
2. Multiword normalization
3. Emerging and Rare entity recognition
4. Make Berkeley/Stanford parser training available for all languages

MoNoise

What?

new	pix	comming	tomoroe
new	picture	coming	tomorrow

MoNoise

How?

- ...

MoNoise

How?

- ...
- Fast

Diachronic/Bilingual word2vec for normalization

What?

cont	continued
aite	allright
uz	use
bb	blackberry

Diachronic/Bilingual word2vec for normalization

How?

- Use raw data from 2 sources, Twitter and Conanical
- Compare to normal w2v model
- Diachronic approaches assume similarities

Diachronic/Bilingual word2vec for normalization

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- Use raw data from 2 sources, Twitter and Conanical
- Compare to normal w2v model
- Diachronic approaches assume similarities
- Integrate in MoNoise:
  `https://bitbucket.org/robvanderg/monoise`

Multiword normalization

What?

iwill	i will
gonna	going to
ni ce	nice
finttna	??

Multiword normalization

How?

- Split all possible positions: ‘i will’ ‘iw ill’ ‘iwi ll’ ‘iwil l’
- Ngrams: ‘Im gonna sleep’ ‘Im going to sleep’
- Word2vec: join all common cooccurrences, and find similars in vector space
- merge: ?

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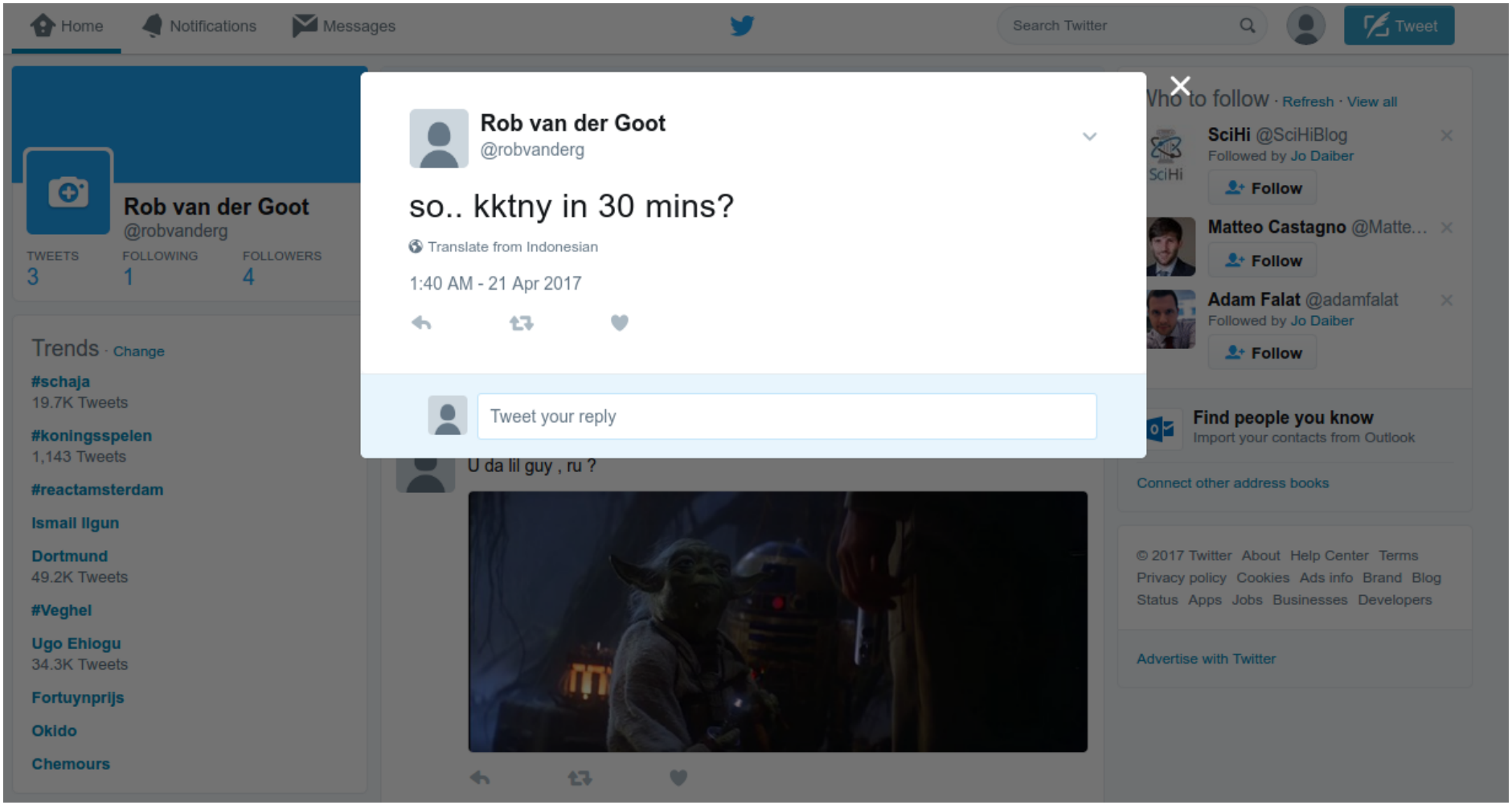
Emerging and Rare entity recognition

What?



Emerging and Rare entity recognition

How?

- Baseline: OOV words
- Exploit N-grams and/or word embeddings

Make Berkeley/Stanford parser training available for all languages

What?

- Models are now available for English, Bulgarian, Chinese etc. (Baseline)
- Pos tags for unknown words are done by hand-made categories
- This is one thing that needs to be done by hand for other languages!

Make Berkeley/Stanford parser training available for all languages

```
if (lowered.endsWith("ed")) {
    sb.append("-ed");
} else if (lowered.endsWith("ing")) {
    sb.append("-ing");
} else if (lowered.endsWith("ion")) {
    sb.append("-ion");
} else if (lowered.endsWith("er")) {
    sb.append("-er");
} else if (lowered.endsWith("est")) {
    sb.append("-est");
} else if (lowered.endsWith("ly")) {
    sb.append("-ly");
} else if (lowered.endsWith("ity")) {
    sb.append("-ity");
} else if (lowered.endsWith("y")) {
    sb.append("-y");
```

Make Berkeley/Stanford parser training available for all languages

How?

- Why not use existing pos-taggers?
- DT1: ‘this’ ‘that’ DT2: ‘the’ ‘a’ DT3: ‘some’ ‘these’
- Optimized in parsing process.
- Automatically detect common suffixes/prefixes etc.