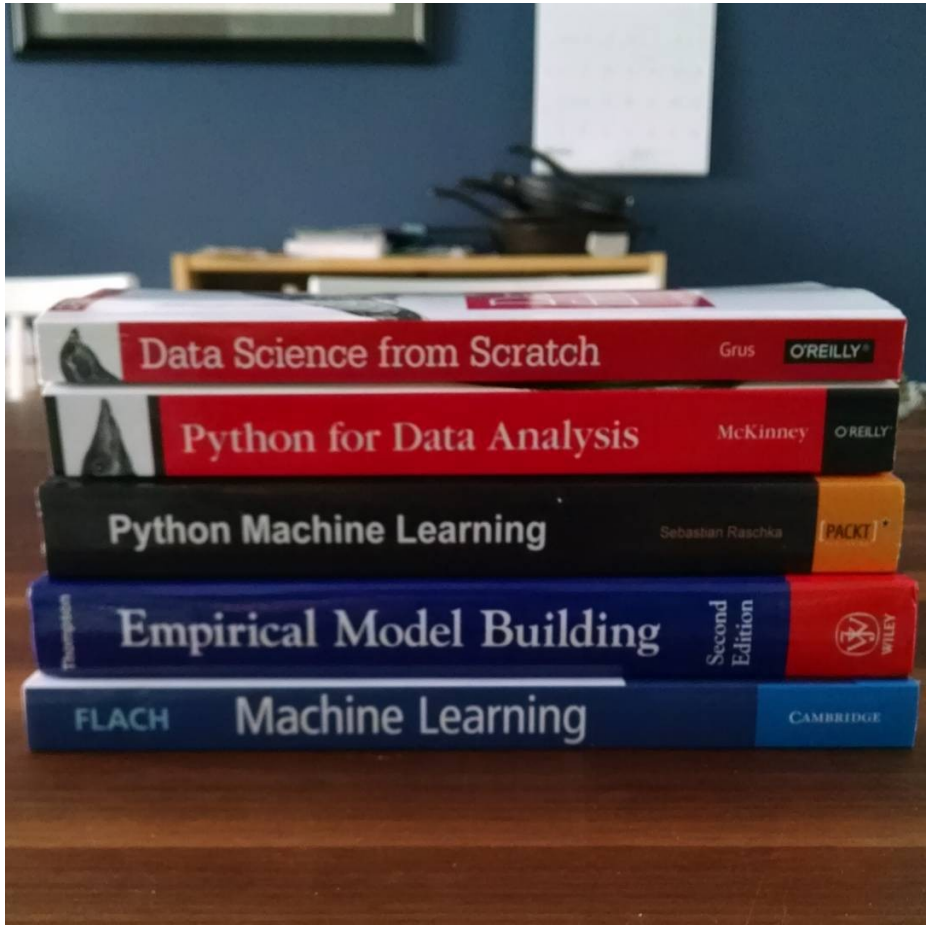
Keyword Mining without Stop Word Lists

PRO-DEV!


Data Science from Scratch
Grus
O'REILLY
Python for Data Analysis
McKinney
O'REILLY
Python Machine Learning
Sebastian Raschka
PACKT
Empirical Model Building
Second Edition
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FLACH
Machine Learning
CAMBRIDGE


coursera

Document Similarity

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- Soccer
- Football
- South
- America
- World
- Cup

Document Similarity

- Soccer
- Football
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- World
- Cup

- the
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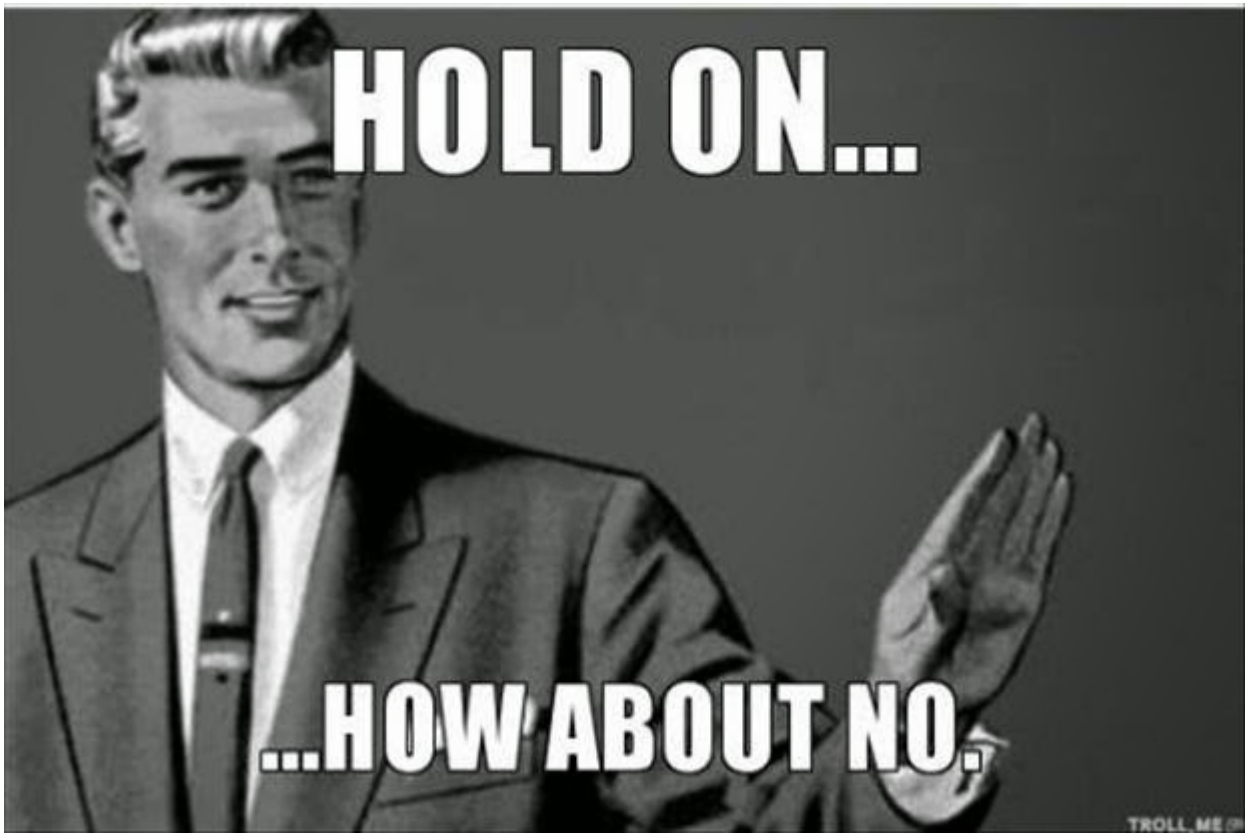
- Wikipedia
- Privacy
- Policy
- Terms


HOLD ON...
...HOW ABOUT NO.
TROLL ME

What is a keyword in a document?

A term that appears frequently within a particular document, but not so frequently in other documents

tf-idf

Term frequency-Inverse document frequency

https://en.wikipedia.org/wiki/Tf%E2%80%93idf

Term Frequency

How often a term appears within a document indicates how “important” it is to that document

{ 'the': 789, 'bocoup': 456, 'loft': 123 }

In practice, we normalize this, because longer documents have more occurrences of words

Inverse Document Frequency

How “rare” a term is within the corpus

math.log(number_of_docs / docs_with_term)

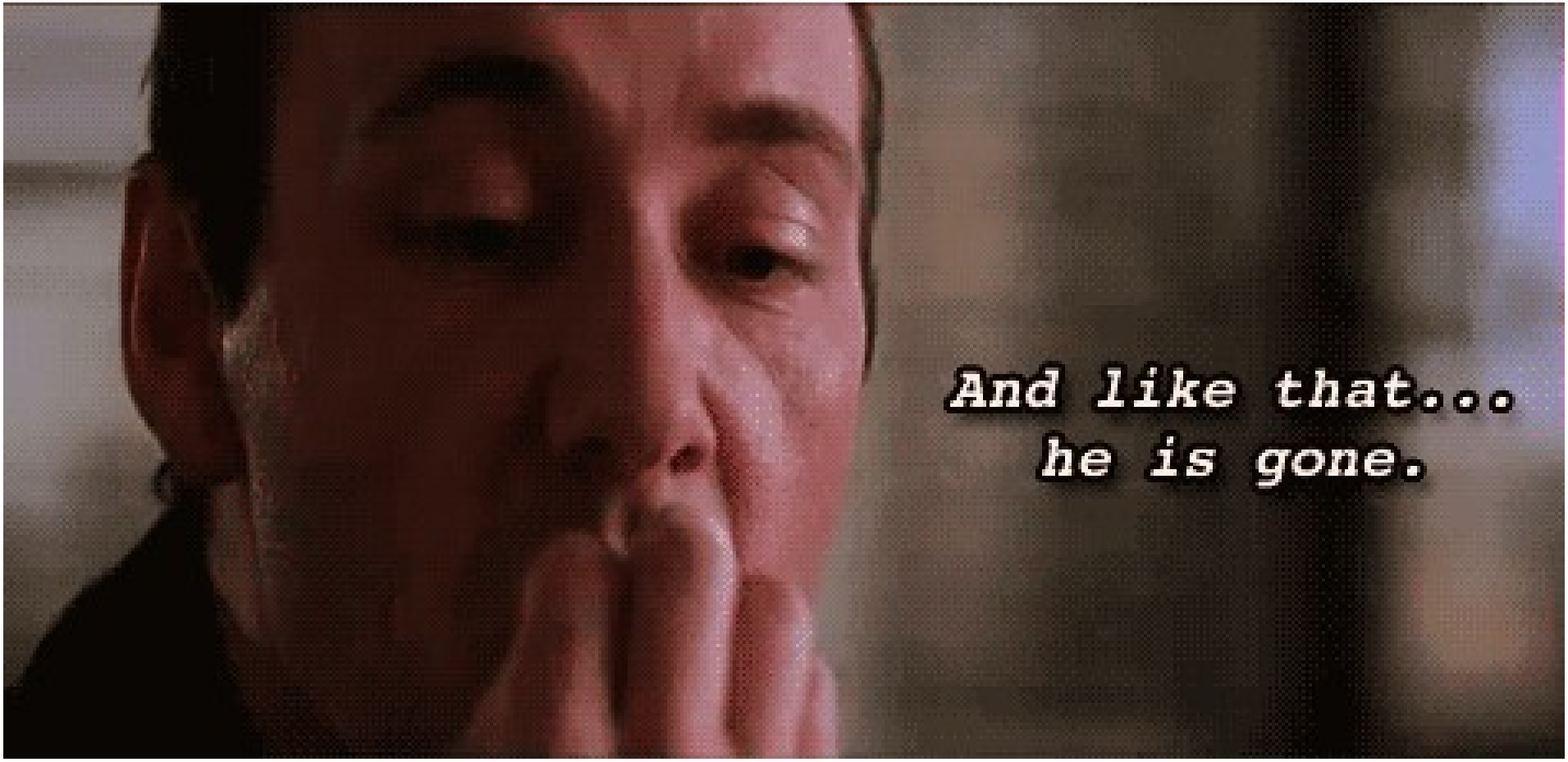
{ 'the': 0, 'bocoup': 0.12, 'loft': 0.84 }

tf-idf

tf = { 'the': 789, 'bocoup': 456, 'loft': 123 }
idf = { 'the': 0, 'bocoup': 0.12, 'loft': 0.84 }

tf-idf = { 'the': 0, 'bocoup': 54.72, 'loft': 103.32 }

Stop Words



Bocoup.com

bocoup.com/about/bocouper/jasmin-jata

- ceramic
- rose
- kelleher
- cephalopod
- reveling
- biology
- scientific
- outlook
- unknown
- overlords

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- milliamps
- paired
- measurement
- programmed
- electronic
- lipo
- easilydiscoverable
- motor
- pasting
- precious

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- scholarship
- applicants
- welcomed
- eligible
- heartfelt
- evaluators
- vented
- devoted
- perspectives
- accomodation

Next Steps and Applications

- Recommendations (Show related blogposts without tags)
- What distinguishes us from competitors?
- SEO/search terms

GitHub

https://github.com/bobholt/ml