

CS341 Journal

Jo, Dilli and Howon

April 9, 2014

Jo: 4-2-2014

This is a lil journal system I like using. Basically, you put a new file whose name is the date (this one is April 2nd, that is, `4-2.tex`) with your journal entry. Then a composite pdf is generated from the python script `GenerateJournal.py`. Its simple and offline, so we still have a collaborative thing but without the annoyances of sharing a google doc. The pdf file could be generated during the pre-commit hook, if you like that sort of thing.

Howon: 4-6-2014

More resources, I found. More thoughts about the data, I had.

<https://dev.twitter.com/docs/platform-objects> is probably most important for not having to go through the json fields themselves. We will have the problem of nulled fields, empty sets, and this field guide (get it? birds?) has the defaults.

<https://github.com/kevinweil/elephant-bird/> is a good resource for dealing with json in hadoop

The dataset is about 400 gb. It seems like a 1% sample would be good, as it allows us to fit it on main memory even on a crappy box like mine. This I approximated a little bit by taking a 1-file sample, which is actually just about a gigabyte: ideally, we would use something like `TABLESAMPLE` in Hive or `SAMPLE` in Pig Latin, because then it would be a good pseudorandom sample.

One troubling thing about taking from the *firehose*, at least at first glance, is that the tweets are taken at the moment of conception. So it's much more annoying to get the favorites data on the tweets.

Histograms about the facts about the users I found are also forthcoming.

Howon: 4-8-2014

Todos

Howon

1. Email the guy about getting the graph data, so we can actually sample the users and we need that graph for other stuff

2. Maybe do an actual sample to think about distributions myself to unbias the tweets (maybe we're ok with just getting people who tweet more?)

Dilli

1. Keywords for one file
2. Think about reconstructing the graph

Jo

Work on implementation of the TwitterRank and the topic distributions

Brainstorming.

Some ideas may be worse than others.

1. We could have more users
2. We could construe each tweet as a separate document
3. Think of a 3-layer bayes net, where user has distribution over topics and the tweet has distribution over topics where prior is over user's distribution over topics.
4. Find a user that does poorly in twitterrank even though they do well in real life or in our algo (someone strong in 2 different fields)
5. What if we pick our own topics, and do actual labelling?
6. Syntax? Stop words? Use NLTK
7. Can we reconstruct the retweeting graph and do everything in the proposal first?