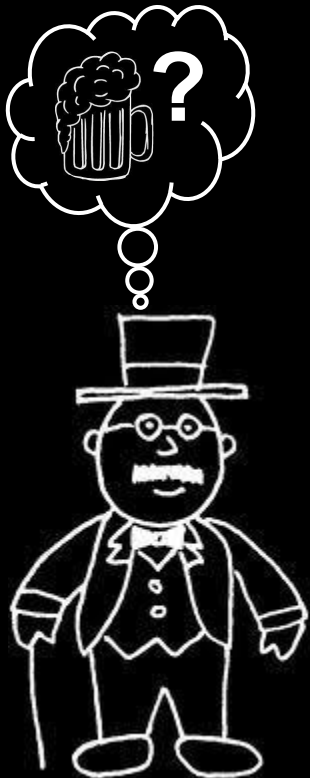


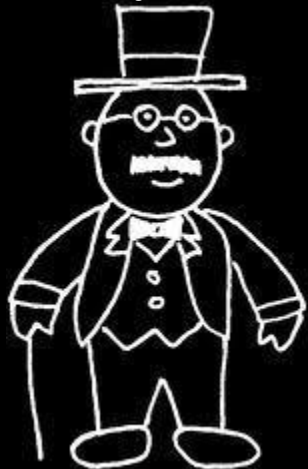
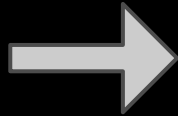
**Problem: It can be hard to get good
craft beer recommendations**

**Solution:
BeerInsight**

Alex Tronchin-James



user reviews

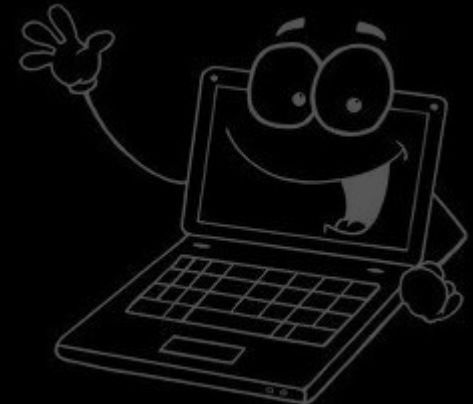


other user reviews

Beeradvocate™



user reviews

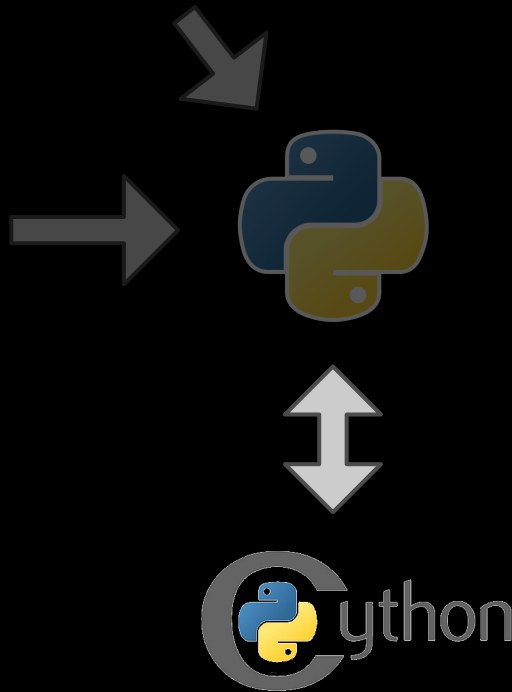


other user reviews

Beeradvocate™

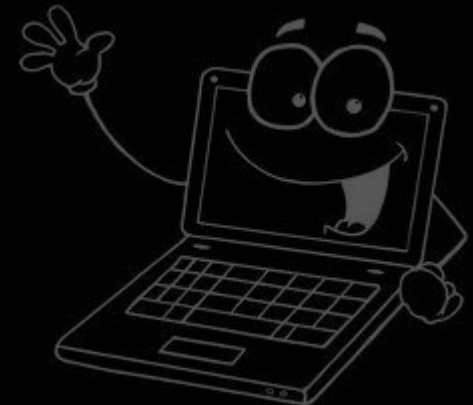


user reviews



collaborative filtering recommender system

Alex Tronchin-James, Insight 2013




The recommender is trained using the BeerAdvocate.com database

- 1,586,614 reviews, text, 0-5 star ratings
 - 56,857 unique beers
 - 33,388 unique users
 - Use these to build the **review matrices** Y and R
-
- Obtained from a friendly blogger (thanks!)
 - Previously available [from Stanford](#)



Home-brew collaborative filtering

- regularized least squares linear regression with L-BFGS optimization
- ython used to return a sparse component of an otherwise dense matrix multiplication

$$\langle X\Theta^T, R \rangle = Y$$

- **pull request** in progress to include this to SciPy.org

location data

other user reviews

Beeradvocate™

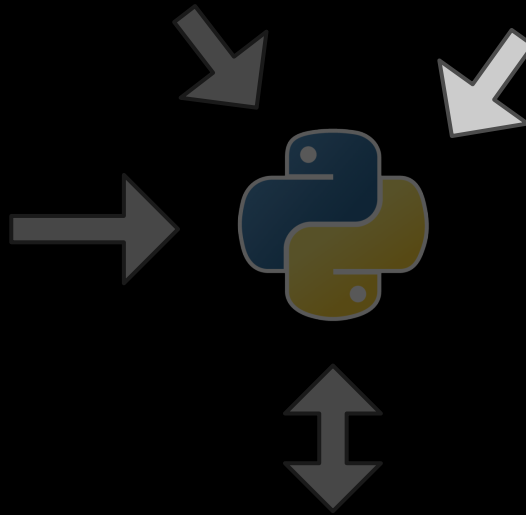


ratebeer

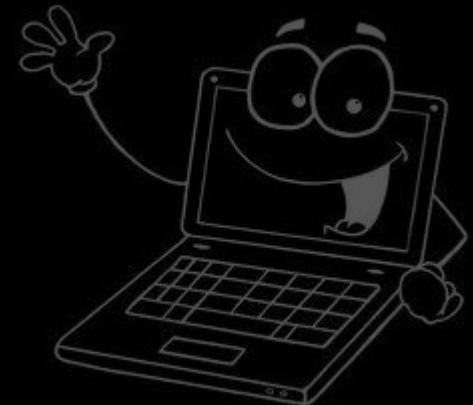


Requests

user reviews



collaborative filtering
recommender system

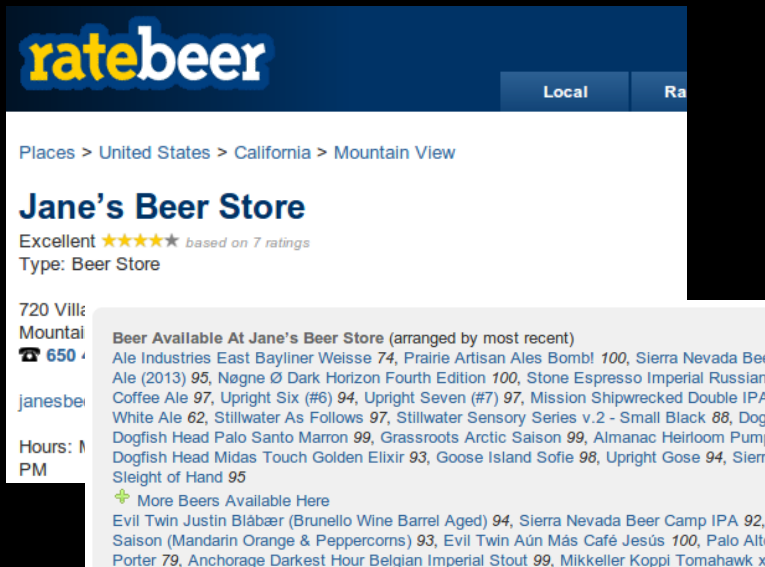


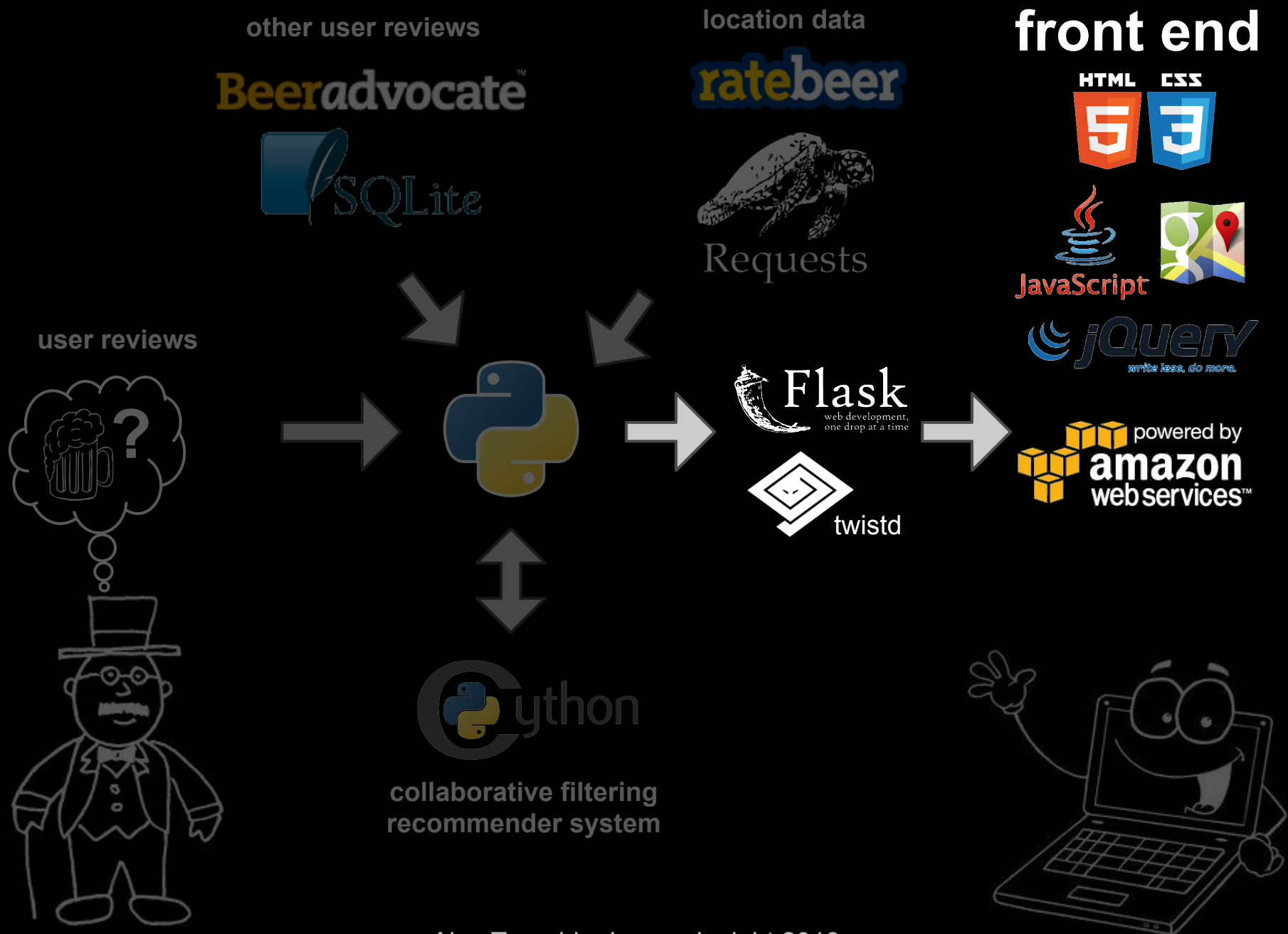
Filter results by location data scraped from RateBeer.com

- Names differ between databases

```
(48, u'Port Brewing/Lost Abbey|Port Brewing High Tide Fresh Hop IPA')  
(46938, u'Port Brewing Company / Pizza Port|High Tide Fresh Hop IPA')
```

- ... but can be matched by n-gram similarity
- mismatches are easy to clean





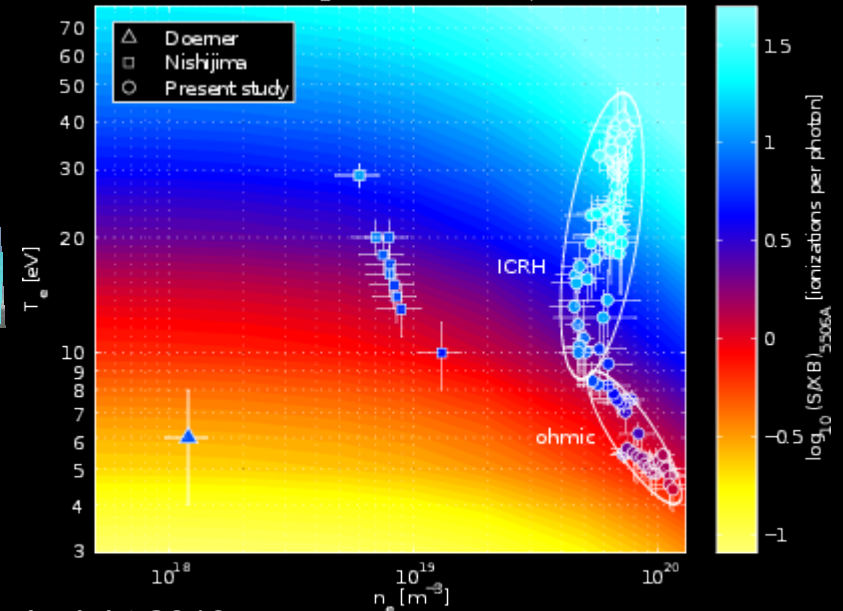
About me

Alex Tronchin-James

UCSD
Jacobs



Mo I S/XB from sxb93#mo_1lu#mo0.dat and experiments for 550.6nm



Alex Tronchin-James, Insight 2013