

DS2000

11/22 - Fri '11

Admin

- final 2 lectures: 11/26 and 12/3
↳ linear regression ↳ 2 fin '11

- Please do TRACE

Agenda

1. Recommendation Algorithm
2. Class methods
3. Python
4. TRACE '11

1. Recommendation Algorithm

↳ TV show, product to buy, accounts to follow, playlists, college to apply, course to take, big life decisions

Assume: I am good at this

- if they know info about you, or the ~~show~~ show(s), a friend can make a good recommendation

I trust I w/ recommendations

- rec from a friend > rec from an algorithm

rec system is ML algorithm

↳ use experience/knowledge to make decisions

current: morning 0 afternoon 1

next: Larry promises to watch 21 episode of each section's rec during break

Data → about ppl, shows

↳ title, rating, sentiment, length, #seasons, year

Algorithm

User show
(Algorithm)



Larry watched,
liked

DB of shows
(spreadsheet)



For each in DB...

- is it good? (rating)
- how similar to user show?
- if similar enough, recommend!

Content-based
filtering

2. Class methods

last time... TVshow class

method: --init--

attrs: title
rating
tone
length
year seasons
...

Driver

- create a TVshow object

Starter code:

- read csv file
- make list of dictionaries
{title: ~, rating: ~}
- make list of TVshows

↳ DB of shows

Algorithm → method (recommend)

def recommend(self, other):

↳ DB Show ↳ user Show

- do we recommend self given other?

- return a boolean yes/no

- calling the method

show.recommend(agatha)

Yes

self.rating > 5

self.tone vs. other.tone
within 3

self.seasons vs. other.seasons
within 2 or 3

and

No

self.rating ≤ 5

tone > 3 apart

seasons > 2 or 3 apart

or