

Recommender Systems

Machine Learning for the Web

a talk for Python Sevilla

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\$> whoami



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MACHINE LEARNING

CLASSIFICATION

REGRESSION

CLUSTERING

RECOMMENDATION

GENERATION



What do you recommend me?

COLLABORATIVE FILTERING
CONTENT-BASED
FILTERING

HYBRID SYSTEMS

FAKE HYBRID SYSTEMS

items

user features

users

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Item features

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“Raw” data

$$\hat{r}_{ui} = f(q_u \cdot p_i + b_u + b_i)$$

$$q_u = (im_1^u, im_2^u, im_3^u, \dots, ex_1^u, ex_2^u, ex_3^u, \dots)$$

$$p_i = (im_1^i, im_2^i, im_3^i, \dots, ex_1^i, ex_2^i, ex_3^i, \dots)$$

Latent factor models



Maciej Kula (Lyst)'s LightFM

SHOW ME

THE CODE



Python Sevilla repository

QUESTIONS

PLEASE!

A MILLION
THANKS
FOR BEING
HERE TODAY