RANKING LOGIC [1]

We know:

$\forall$ Actively listed PID:

▸ $\exists$ a list of <u>similar PIDs</u> with P(Similar PIDs | PDP's PID)

$\forall$ Login member MID:

▸ $\exists$ a list of <u>Preference</u> with P(User Prefs | Login MID)

Given a PDP with login Member (PID*, MID), we have:

P(Similar PIDs | PID*), P(User Prefs | MID).

SSENSE

RANKING LOGIC [2]

Product Similarity:

$P(\text{Similar PIDs} \mid \text{PID}^*)$

User Preference ➡ Product Similarity:

$P(\text{User Prefs} \mid \text{MID}) \gg P(\text{Similar PIDs} \mid \text{PID}^*)$

[rounded] Product Similarity ➡ User Preference:

$\text{round}(P(\text{Similar PIDs} \mid \text{PID}^*)/d)^*d \gg P(\text{User Prefs} \mid \text{MID})$, while $d \in [1, 0.5, 0.1, 0.05, 0.01]$

SSENSE