

Information Overload

Information Filter

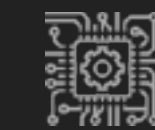


Web Directory



Search Engine

Personalization



Recommendation

$P(\text{Prod} \mid \text{user's history})$

Assess how a user will like / purchase / visit an item that has never seen before.

MOTIVATION

CRITERION

- ▶ Satisfaction: Conversion Rate (Click Rate), Survey
- ▶ Accuracy: precision/recall/F-score/MAP@N
- ▶ Coverage: cold start problem (User/Item), long-tail product
- ▶ Diversity: different but correlated
- ▶ Novelty: never heard of, new
- ▶ Robustness: Anti-attack, reseller, SSENSE Employee
- ▶ Real-time/online: real time behaviour (Session-based Recommendation)