



INSTACART RECOMMENDER

Order something tasty





WHY RECOMMEND?

"...35 percent of what consumers purchase on Amazon and 75 percent of what they watch on Netflix come from product recommendations..."

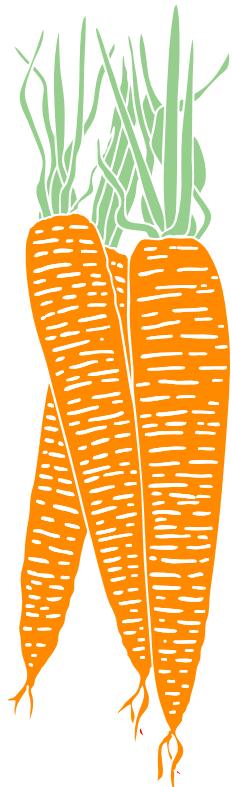


DEMO



DATA

Kaggle Competition



We have:

- 131,209 customer orders
- No customer information

We know:

- The products included in each order
- The order in which the products were added to the shopping cart

MODEL

Item-Based Collaborative Filtering



Theory:

- Items added to the cart in sequence can be considered similar items

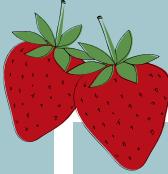
Success:

- User testing
- Qualitative assessment of logical item-item pairs
- Root Mean Square Error

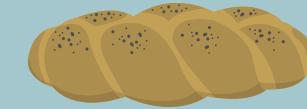
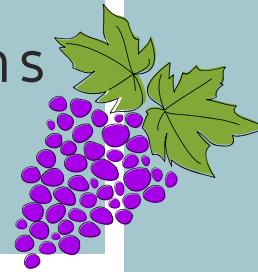
Peanut
Butter
+
Jelly

Tortilla
Chips
+
Salsa

Bagels
+
Cream
Cheese

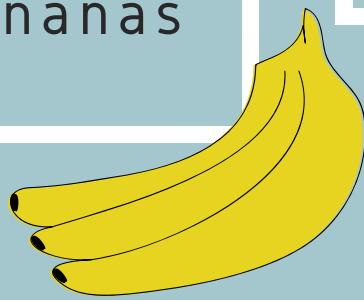


There were 39,123 unique products ordered, but 852 products account for 50% of all items ordered

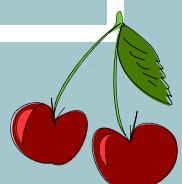


Organic shoppers are organic loyalists

People really like bananas



The high number of product skews can render product recommendations trivial





THANK YOU!

www.github.com/spalmerg