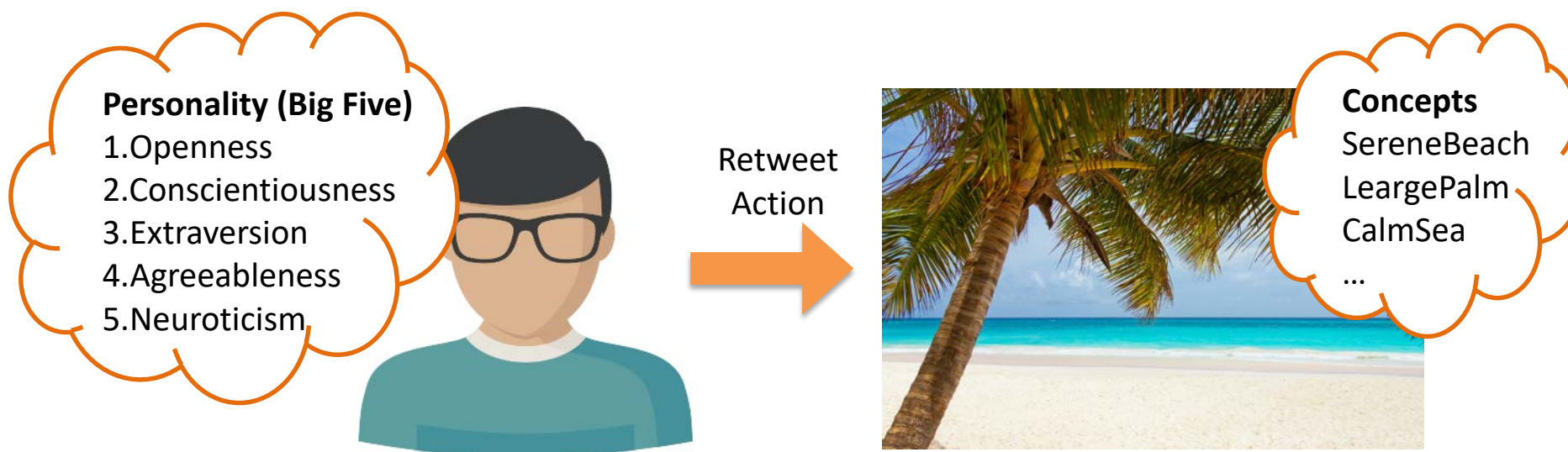


How Personality Affects our LIKES: Towards a Better Understanding of Actionable Images

- Images are commonly used to persuade a target audience into committing or avoiding actions
- Discovery of actionable images requires knowledge about the audience



How Personality Affects our LIKES: Towards a Better Understanding of Actionable Images

Statistical Analysis

- Pearson correlation and multiple correlation coefficients were computed
- Some image concepts have a significant (positive or negative) correlation with personality traits

Openness	
+	-

(+):
HiddenPlaces, OldChurch
(-):
BigBrother, ActiveKids

Conscientiousness	
+	-

(+):
EnvironmentalIssue, RoyalBank
(-):
SadGirl, YoungAge

Extraversion	
+	-

(+):
SexyWomen, CrazyDays
(-):
IndustrialWaste, NaturalScience

Agreeableness	
+	-

(+):
FreshAir, PerfectDay
(-):
PregnantWomen, HotYoga

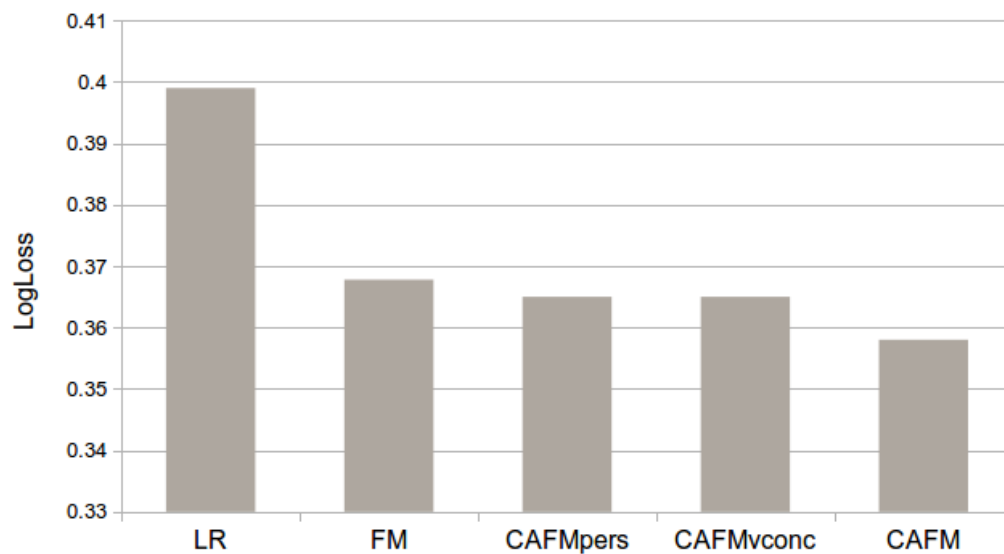
Neuroticism	
+	-

(+):
SadGirl, SweetKiss
(-):
LargeEvent, CompetitiveSport

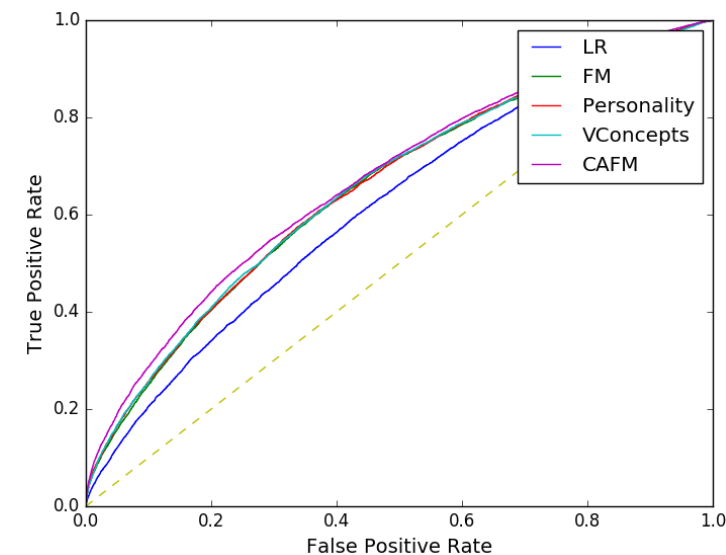
How Personality Affects our LIKES: Towards a Better Understanding of Actionable Images

Action Prediction

- Given user u and image i , the goal is to estimate the probability of action: $p(\text{act}(u,i))$
- We designed a novel model called Content-Aware Factorization Machines (CAFEM)
- Baselines: Logistic Regression, Factorization Machines, Personality only, Concepts only



Performance of CAFM in terms of log-loss



Performance of CAFM in terms of ROC AUC