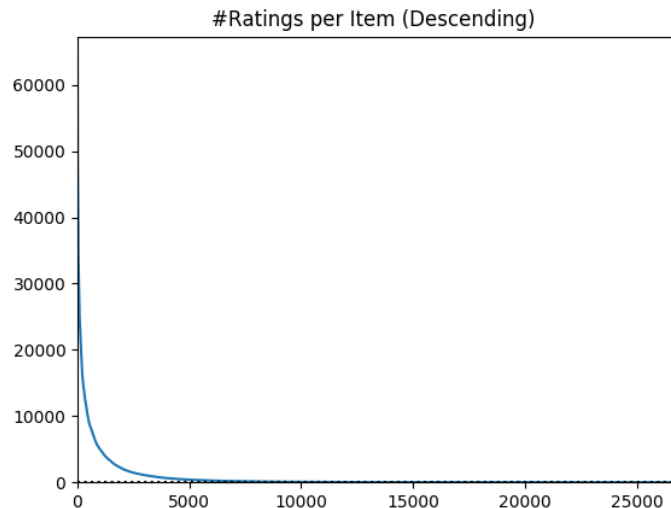# Item Popularity

Prediction

$$\hat{x}_{ui} = \frac{\#\text{interactions with item } i}{\#\text{interactions}}$$

Power-Law Nature of #Interactions

#Ratings per Item (Descending)

Frequency Distribution of Movielens-20M Ratings

Pros & Cons

+ simple & efficient

+ no parameters to train

+ solves cold-start problem

+ works well due to power-law nature of interactions

− no tailoring of recommendations to users' specific preferences