

Lab 2. Recommendation Models.

Display the model applicable to the objects of type *realRatingMatrix* using *recommenderRegistry\$get_entries*:

```
recommender_models <- recommenderRegistry$get_entries(dataType = "realRatingMatrix")
names(recommender_models)

## [1] "IBCF_realRatingMatrix"      "PCA_realRatingMatrix"
## [3] "POPULAR_realRatingMatrix"   "RANDOM_realRatingMatrix"
## [5] "SVD_realRatingMatrix"       "UBCF_realRatingMatrix"

lapply(recommender_models, "[", "description")

## $IBCF_realRatingMatrix
## [1] "Recommender based on item-based collaborative filtering (real data)."
##
## $PCA_realRatingMatrix
## [1] "Recommender based on PCA approximation (real data)."
##
## $POPULAR_realRatingMatrix
## [1] "Recommender based on item popularity (real data)."
##
## $RANDOM_realRatingMatrix
## [1] "Produce random recommendations (real ratings)."
##
## $SVD_realRatingMatrix
## [1] "Recommender based on EM-based SVD approximation from package bcv (real data)."
##
## $UBCF_realRatingMatrix
## [1] "Recommender based on user-based collaborative filtering (real data)."
```

I will use IBCF and UBCF. Check the parameters of these two models.

```
recommender_models$IBCF_realRatingMatrix$parameters

## $k
## [1] 30
##
## $method
## [1] "Cosine"
##
## $normalize
## [1] "center"
```

```
##
## $normalize_sim_matrix
## [1] FALSE
##
## $alpha
## [1] 0.5
##
## $na_as_zero
## [1] FALSE
##
## $minRating
## [1] NA
recommender_models$UBCF_realRatingMatrix$parameters
## $method
## [1] "cosine"
##
## $nn
## [1] 25
##
## $sample
## [1] FALSE
##
## $normalize
## [1] "center"
##
## $minRating
## [1] NA
```