

Table 1: Predictor Selection

|                                   | cum time | ndcg | score | MAE  | score diff |
|-----------------------------------|----------|------|-------|------|------------|
| Best                              | 12.63    | 1.00 | 1.00  | 0.00 | 0.00       |
| DecisionTreeRegressor             | 15.80    | 0.50 | 0.11  | 2.06 | 43.12      |
| DecisionTreeRegressor bin         | 15.84    | 0.43 | -0.17 | 2.31 | 43.67      |
| DecisionTreeRegressor weights     | 16.29    | 0.48 | -0.12 | 2.10 | 45.09      |
| DecisionTreeRegressor weights bin | 16.35    | 0.42 | -0.18 | 2.28 | 45.03      |
| K-nn Regressor                    | 15.93    | 0.53 | 0.16  | 2.00 | 43.41      |
| K-nn Regressor bin                | 15.87    | 0.42 | -0.18 | 2.32 | 43.24      |
| K-nn Regressor weights            | 15.87    | 0.42 | -0.18 | 2.32 | 43.24      |
| K-nn Regressor weights bin        | 15.87    | 0.42 | -0.18 | 2.32 | 43.24      |
| LinearReg                         | 15.17    | 0.42 | -0.16 | 2.45 | 49.25      |
| LinearReg bin                     | 15.17    | 0.42 | -0.29 | 2.46 | 49.28      |
| LinearReg weights                 | 15.32    | 0.42 | -0.41 | 2.44 | 48.71      |
| LinearReg weights bin             | 15.35    | 0.41 | -0.27 | 2.45 | 48.99      |
| NuSVR                             | 15.57    | 0.47 | 0.14  | 2.26 | 47.45      |
| NuSVR bin                         | 15.43    | 0.43 | -0.24 | 2.31 | 44.17      |
| NuSVR weights                     | 15.61    | 0.47 | -0.06 | 2.19 | 42.86      |
| NuSVR weights bin                 | 15.70    | 0.45 | -0.20 | 2.23 | 43.34      |
| Random                            | 19.06    | 0.36 | 0.00  | 2.62 | 50.77      |
| RandomForestRegressor             | 15.02    | 0.48 | 0.28  | 2.08 | 38.91      |
| RandomForestRegressor bin         | 14.92    | 0.48 | -0.18 | 2.13 | 39.19      |
| RandomForestRegressor weights     | 15.06    | 0.48 | 0.18  | 2.12 | 39.46      |
| RandomForestRegressor weights bin | 15.09    | 0.48 | -0.16 | 2.15 | 39.18      |
| Ridge                             | 15.11    | 0.42 | -0.15 | 2.45 | 49.09      |
| Ridge bin                         | 15.14    | 0.41 | -0.29 | 2.46 | 49.29      |
| Ridge weights                     | 15.02    | 0.41 | -0.21 | 2.48 | 50.15      |
| Ridge weights bin                 | 15.03    | 0.41 | -0.23 | 2.49 | 50.09      |
| Worst                             | 30.26    | 0.00 | 0.00  | 4.00 | 94.65      |