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**Class 8 - A Comparative Study of Collaborative Filtering Algorithms**

These authors shoulder the task of empirically testing many different collaborative filtering algorithms on several different types of datasets and in many different circumstances. Across all these experiments, distinct leaders emerged given the parameters of the experiment. The authors note that the prediction accuracy appears to be dependent on the number of users, the number of items, and the density of the rating-matrix. Overall, Matrix-Factorization techniques (in particular, SVD) proved to be the best in most scenarios. However, there are certain instances where other collaborative filtering algorithms prove superior to SVD; for example, when memory and computation restrictions begin to be introduced.

The rest of the paper uses figures and tables to cleanly demonstrate which models perform best in any given circumstance. The paper is laid out in such a way that any future developer can analyze the problem they find themselves trying to solve, identify which regime their situation is covered by (rating matrix density, user-count, item-count, memory limitations, computation-time limitations), and look up which collaborative filter algorithm would theoretically best suit them.