

**CS 181 Machine Learning**  
**Practical 4 Report, Team *la Dernière Dame M***

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**1 Exploratory Analysis**

**2 Method**

**2.1 Rationale on Model Choice**

**2.2 Estimation**

**2.3 Numerical Challenges & Further Modification**

**2.3.1 Parameter Selection**

### 3 Discussion & Possible Directions

## Reference

1. Ricci F, Rokach L, Shapira B et al. (2010) **Recommender Systems Handbook**. *Springer*.
2. Koren Y, Bell R, Volinsky C. (2009) **Matrix factorization techniques for recommender systems**. *IEEE Computer* Aug 2009, 42-49.
3. Srebro N, Jaakkola T.(2003) **Weighted low-rank approximations**. *Proceedings of the Twentieth International Conference* 720727.
4. R Salakhutdinov, A Mnih. (2008) **Probabilistic Matrix Factorization**. *Advances in Neural Information Processing Systems* Vol. 20
5. Koren, Y. (2008) **Factorization Meets the Neighborhood: a Multifaceted Collaborative Filtering Model**, *Proc. 14th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*.