

CS 181 Machine Learning

Practical 4 Report, Team *la Dernière Dame M*

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May 5, 2015

1 Problem Description

2 Method

2.1 Rationale on Model Choice

2.1.1 State

2.1.2 Exploration/Exploitation Parameters

Learning rate

ϵ -greedy

3 Result

3.1 State Exploration

3.2 Convergence Behavior

4 Discussion & Possible Directions

Reference

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2. Koren Y, Bell R, Volinsky C. (2009) **Matrix factorization techniques for recommender systems**. *IEEE Computer* Aug 2009, 42-49.
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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*.