

LIST OF FIGURES

3.1	System Design	7
3.2	The Visualization of Aggregate Prediction	8
3.3	The example of rating matrix	9
3.4	The example interaction of collaborative filtering	10
3.5	Sparse autoencoder in group recommender system using aggregate prediction	11
3.6	The architecture sparse autoencoder in our system	12
4.1	Movielens 100k and Movielens 1m Rating Distribution	18
4.2	MAE Results from Sparse Autoencoder Tuning Experiments	19
4.3	RMSE Results from Sparse Autoencoder Tuning Experiments	20
4.4	Visualization of the effect of using sparse regularization on hidden layers . .	21