Requirments Left Out

* Discussion of relevant work in literature
* Dicussion of how research goes beyond literature
* Novelty to approach
* Specialize model

Introduction

* Motivation for making prediction only using adjacency matrix

Baseline Models

* Predict most likely value
  + By gender
* Simple non-probabilistic collaborative filtering
  + Jaccard Similarity
  + Equation

Matrix Factorization Latent Variable Model

* Objective function to optomize
* Derivation of stochastic gradient descent to find MLE (inference)
* Graphical model diagram
  + Sigmoid “link?” function
  + Out probability (therefore, probablistic model)

MF Results

* 2 factors
* 3 factors
* Evaluation
  + BIC
  + Interpret latent factors