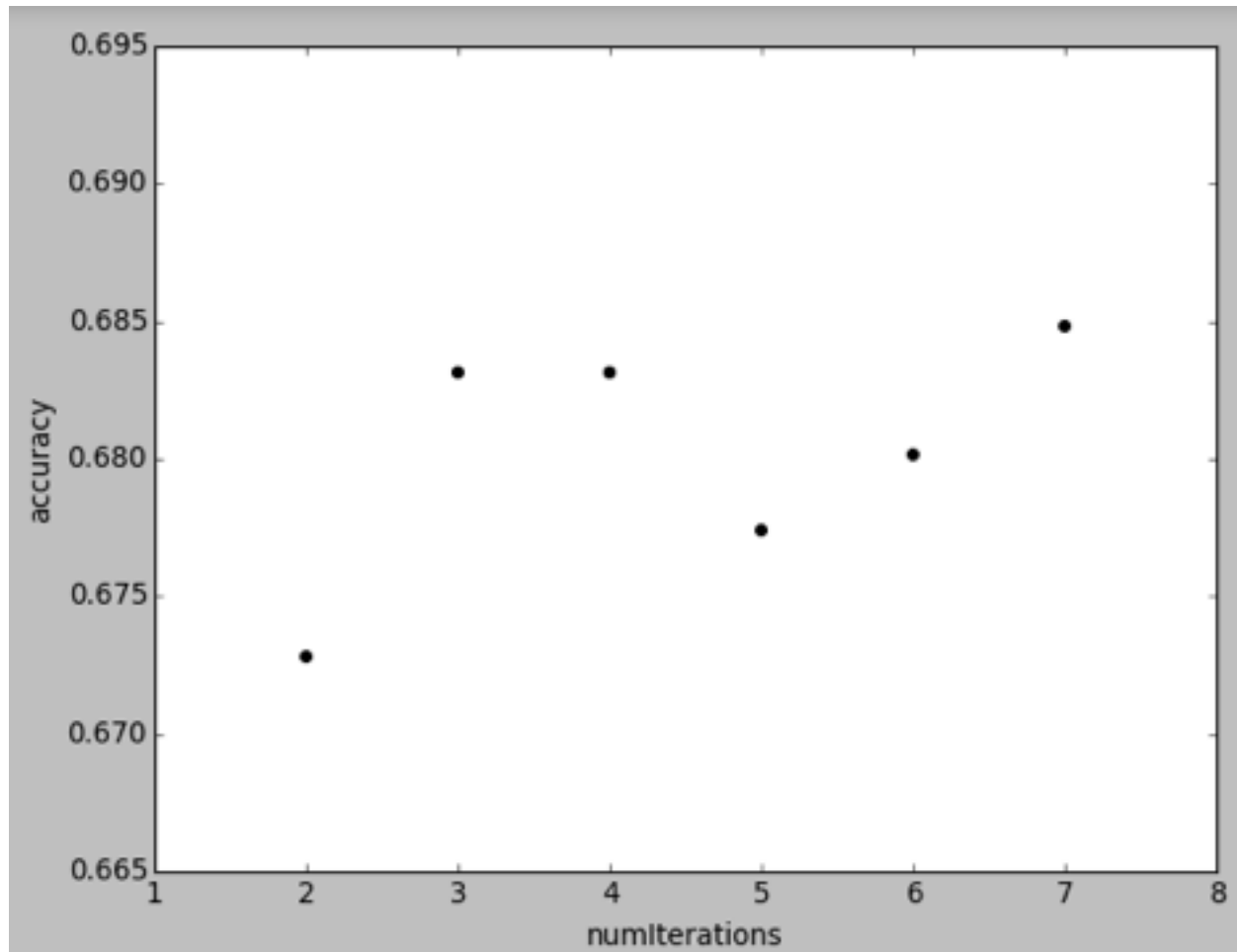
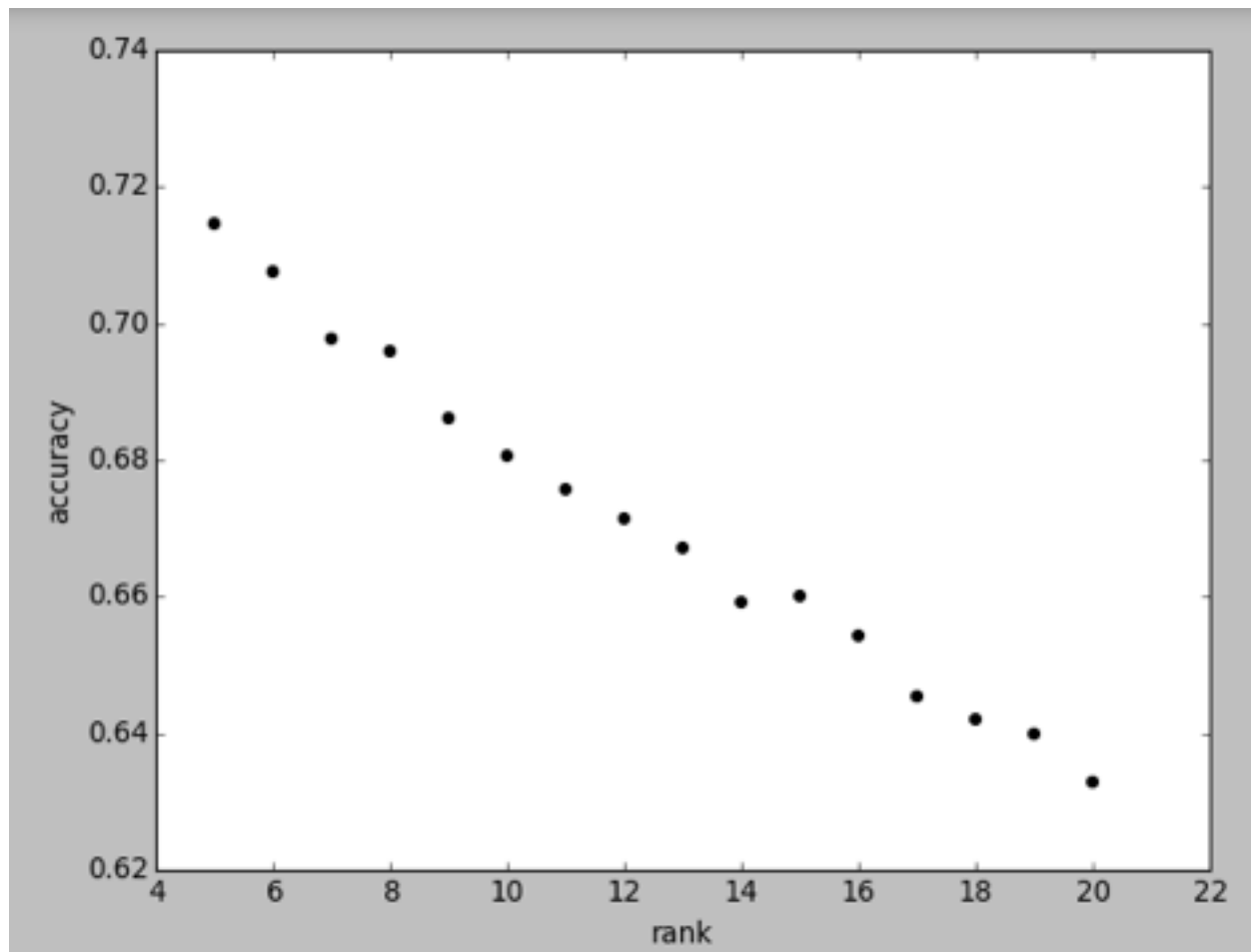


## Part 1

1. Fixed rank at 10 and varied number of iterations from 2 to 7 (7 was the max I could run without error).



2. Fixed numIterations at 7 and varied rank from 5 to 20.



3. Final Parameters used for my model:

rank = 5

iterations = 7

lambda\_ = 0.1

4. Accuracy on validation set with these parameters:

0.72376

## Part 2

1. I was asked to rate these ten random movies, and had only watched 2 of them.

- Star Trek IV: The Voyage Home (1986): 4
- D3: The Mighty Ducks (1996): 0
- Widows' Peak (1994): 0
- Clockers (1995): 0
- Romy and Michele's High School Reunion (1997): 0
- Eye for an Eye (1996): 3
- Cemetery Man (Dellamorte Dellamore) (1994): 0
- Harold and Maude (1971): 0
- Contact (1997): 0
- Blood Beach (1981): 0

2. The ten movies I was recommended were:

1. Deceiver (1997)
2. Street Fighter (1994)
3. Shadow Conspiracy (1997)
4. Mr. Magoo (1997)
5. Jingle All the Way (1996)
6. Turbulence (1997)
7. Stupids, The (1996)
8. Hurricane Streets (1998)
9. Boys of St. Vincent, The (1993)
10. Doom Generation, The (1995)

3. The system did recommend movies that I think I would like. I have seen Mr. Magoo before and I enjoyed that movie. I haven't seen the rest, but for most of them when I looked up the plot line on Google they sounded interesting and something that I might enjoy watching.