Sheet 6

(Not to be submitted)

1 Reading and Research

You are encouraged to continue reading papers related to topics we've discussed in class. I recommend reading about two papers from the list below. Alternatively, you are welcome to look at the proceedings of conferences and read papers that appeal to you. The main conferences related to machine learning are:

- Neural Information Processing Systems (NIPS)

- International Conference on Machine Learning (ICML)

Additionally, there are more specialized conferences focusing on representation learning, vision, language, etc. You can look for ICLR, CVPR, ICCV, ACL, etc.

Here is a list of papers that I think relate to what we've been discussing in class this week.

1. **Natural Language Processing (Almost) from Scratch**. R. Collobert, J. Weston, L. Bottou, M. Karlen, K. Kavukcuoglu, P. Kuksa. *JMLR 2010.*

2. **What is the best multi-stage architecture for object recognition?**. K. Jarrett, K. Kavukcuoglu, M. Ranzato, Y. LeCun. *ICCV 2009.*

3. **ImageNet Classification with Deep Convolutional Neural Networks**. A. Krizhevsky, I. Sutskever, G. Hinton. *NIPS 2012*

4. **Visualizing and Understanding Convolutional Networks**. M. Zeiler, R. Fergus. *ECCV 2014.*

5. **A Convolutional Neural Network for Modelling Sentences**. N. Kalchbrenner, E. Grefenstette, P. Blunsom. *ACL 2014*

6. **Very Deep Convolutional Networks for Large-Scale Image Recognition**. K. Simonyan and A. Zisserman. *ICLR 2015*

Finally, if you are brave enough to dig through optimization you may want to read: **Train faster, generalize better: Stability of stochastic gradient descent**. M. Hardt, B. Recht, Y. Singer.