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1. Test accuracy: 0.8089
2. I use the architecture showed in the slides, the only difference is that I delete the dropout layer after the 8^{th} convolutional layer. And I set all dropout probability to 0.5.
3. The learning rate is 0.0002 in the first 21 epoch, 0.0001 in the 22~31 epoch and then becomes 0.00005 in the rest epoch. The total number of epoch is 59, and the batch size is 50.
4. I trained this CNN with ADAM.
5. For data augmentation, I flip the picture horizontally in one batch with the probability of 0.5.
6. In Monte Carlo simulation, I set the k = 50 which means I sample 50 neural nets using dropout for each test case and average their predictions. The accuracy is 0.8022 which is a little lower than the accuracy 0.8089 in the heuristic prediction rule.