## Weekly Report

冯浩哲

2017年10月29日

## Outline

- The tasks I have finished this week
- Things we want to do next week

## The tasks I have finished this week

This week, I mainly focus on 2 articles[1],[2]. The first one is an important article illustrate the details of new deep learning structure "Capsules with dynamic routes" written by Hinton and the last one is a new article about deep learning in lung nodule segmentation.

I write the literature study reports for the 2 articles, especially for Hinton's paper. However, Hinton's paper show a number of state-of-the-art ideals, and I can't fully understand all of them, so there are some doubts and uncertainty in my study report.

## Things we plan to do next week

We will still do our research and practice some ideas according to the summary of discussion with Professor Chen last week, and we will record our problems and discuss them with Professor Chen next Monday.



Sara Sabour, Nicholas Frosst, and Geoffrey Hinton. Dynamic routing between capsules. 2017.



Shuo Wang, Mu Zhou, Zaiyi Liu, Zhenyu Liu, Dongsheng Gu, Yali Zang, Di Dong, Olivier Gevaert, and Jie Tian.

Central focused convolutional neural networks: Developing a data-driven model for lung nodule segmentation.

Medical Image Analysis, 40:172–183, 2017.