**Report architecture**

**The 25 marks are divided into four sections: training (30%), validation (10%), inference (10%), code quality (10%) and report quality (40%).**

**每人务必1-2个reference, 充足实验证据**

1. **Introduction(10%):** discuss the data sets involved, the machine learning task, relevant work and what you aimed to achieve.（300字左右）

* Dataset: 尽可能详细描述数据集
* Machine learning task: tutorial.ipny上面
* Aim: 要完成什么，期待的目标

1. **Implementation(35%):**describe how you implemented your neural network and the associated performance analysis mechanisms. Explain why you chose to do it that way. Remember to cite any sources you used.（1000字左右）

* 详细描述和介绍网络结构,性质,期待的表现,为什么选这个网络结构
* 如何实现的(data processing**数据增强** & coding structure)
* performance analysis mechanisms: training, testing methods, metrics (Dice score)
* 代码里写清楚comment

1. **Experiment(40%):**describe the experiments you carried out to optimize your network’s generalization performance and present the results you obtained. Explain in detail how you used the training, validation and test data sets. The results should be presented in a statistically rigorous manner.（1200字左右）

* description of experiments to optimise generalization performance
* 多种优化器(优化器参数: regularization)比较，多种loss比较，学习率比较
* Epoch数和batch\_size数比较
* results presentation, presented in a statistical rigourous manner
* how the training and test data sets are used

1. **Conclusion(10%):**summarize your key findings, including which factors proved most crucial, and what was the best generalization performance you achieved.（300字左右）

* Key findings:哪一层不好分(准确率低)，哪一层更好区分，原因
* Crucial factors
* Best generalization performance