

Machine Learning

Lab 11 & 12

In this lab, you will be working on article review and essay writing. Please find below a tutorial of how to review an article about machine learning.

Choose an ML application

Some examples may include but not limited to image classification, time series prediction, etc.

Find several good journals or conferences about this topic

You are encouraged to find one/several articles from good computer science journals and conferences. Search your topic on Google Scholar or publisher's website.

Some good computer science journals:

- IEEE Transactions on Neural Networks and Learning Systems
- IEEE Transactions on Pattern Analysis and Machine Intelligence
- Information Science
- Neurocomputing
- Other IEEE Transaction, Elsevier journals you may find

Some good computer science conferences:

- IEEE/CVF Conference on Computer Vision and Pattern Recognition
- AAAI Conference on Artificial Intelligence
- Other conferences you may find

If you find it difficult to understand these articles, you could try to find some easier articles from other publishers.

Or you could also look for review articles which summarise the recent techniques for one ML topic. For example,

- Claussmann, L., Revilloud, M., Gruyer, D., & Glaser, S. (2019). A review of motion planning for highway autonomous driving. IEEE Transactions on Intelligent Transportation Systems, 21(5), 1826-1848.

Review the article by summarising the following contents

You should include the following contents:

- Why this ML topic is important?
- What is the challenge or issue that the article aims to solve?
- What is the method that this article employs to solve this problem?
- What is the performance/accuracy of the results?

- Your opinion about how to improve this research (use this for your coursework).
- References and Q & A.

Discussion

It is suggested to discuss your findings with a tutor and get some feedback about how to improve your work. You can also present your paper review using some slides during seminar sessions.