Summary of the reports: State of the art of un-supervised learning and where it is being currently used

Yue Liu

Topics they covered with very brief description

Another topic for machine learning is State of the ART of machine learning models to detect segment objects (Tensorflow Zoo is good starter). It is important to mention it because some of our team members changed their topic(for a new one about machine learning or doing the first topic of machine learning).

Here is the list of our report:

Report Title	**Questions to the author**
Future Languages in Machine Learning	Does Language really important?
State of the art of object segmentation methods based on machine learning algorithms	Are there any differences between the typical algorithms we learned in graduate level courses?
Machine Learning and Artificial Intelligence	This might be a huge topic...
A survey of Dimensionality Reduction Techniques	When to reduce the dimension?
Multi-View 3D Object detection network for autonomous driving	I am curious about the significance...
Snorkel	For more details, see my report.

In the presentation, I pick up some helpful figures or tables from the reports.

New things you learned from their report

The reports from our group can be divided into two groups: general questions and applications. Although I might use a “critical” way to express my understanding, the group works are still

great for me. I mentioned the so-called “short comings” simply because I literally made it in my undergraduate one-by-one as a student whose major is Chinese, and our class director is focusing on academic writing.

In the general question group, it is easy for the author to copy and paste too much or use a wrong writing style. The last thing to do is follow the format: a person writes a paper about something, repeating three to five times. Now, let me go into my questions after reading the topic: (1) Does programming language really important? Better than real-world language, it is a thing with common sense in the CS world; (2) the figure about brain does not match the point of the author, why not changing another one; (3) When to use dimension reduction, at least in PCA?

In the application group, author might stop in a specific model or project, ignoring the topic of the group. If you can distinguish the related concepts, just do it; if you can draw a figure by yourself, just do it. About the content, I am thinking about the following things: (1) what is the similarities in the object segmentation models; (2) what are the pros and cons of the multi-view 3D object detection network?

Moreover, we should not include typos and common sense mistakes. For example, numpy should not be written in “numba”. Also, k-nn should be a classification model. We should be extremely careful about the categories. I point it out just to remind myself in the future, only with good will.

References

[1] Zhou, Yuhao. (2019-11). Future Languages in Machine Learning [Web blog post]. Retrieved from https://github.com/YUHZ-ACA/602-mini-project-2 .
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