COSE361 : Artificial Intelligence

Homework 3

If we model only to get best precision, we can get the right value well. But among the right values, there can be a lot of values that is not selected by the model yet because of not good recall.

And if we model only to get best recall, we can get a lot of right values from real right values. But the model might pick wrong value a lot to increase recall. So there is recall-precision trade-off. It is important to consider both recall and precision and get appropriate model.

Occam’s razor is a principle. This principle claims that you should not have unnecessary assumption a lot and if you can explain something with less logic, you must not have more logic. This occam’s razor prefer simple theory.

Dimensionality means the amount of information. For example, if we only have heights and weights data, dimensionality is 2. If we get more informations such as age, blood pressure, dimensionality increases and we can manage more information. However, as dimensionality increase, the model needs much more data to learn and it is very hard to learn for the model. This is called the curse of dimensionality.

A: 오늘 땅이 젖는 확률 / B: 내일 비가 올 확률 / C : 오늘 비가 올 확률