

Python Implementations of Decision Tree and Naive Bayes

Goals

1. Coding simplified methods from scratch, on tiny datasets to understand the code
2. Using code library SciKit-Learn code libraries to see medium size examples in action

Explanation

- Writing small simple code gives us a chance to implement the models. Along the way we can learn/review Python coding basics.
- However, this simple code has limitations, so we want to move over to code libraries
- The code libraries are useful for comparing models, and running bigger problems. However, the code is long, and not suitable for reading/learning from. So we warm up with the toy examples.

Limitations

- The toy examples are incomplete (buggy), because they came from older versions of python code. However, still good for running and trying out

Resources:

- Python code documentation: <https://docs.python.org/3/tutorial/datastructures.html#dictionaries>
- Scikit learn decision tree: <https://scikit-learn.org/stable/modules/tree.html#tree>
- Scikit learn [text classification example](#)
- Code folder: <https://drive.google.com/drive/folders/1-C4Zz59om9j3Ajsjl6Enb-vOlyhMxK-?usp=sharing>
- Textbook Machine Learning in Action PDF, use chapters 3 and 4 to work through toy examples (but code it older python) <https://github.com/ahmedfarhat/software-development-ebooks-1/blob/master/%5BMachine%20Learning%20in%20Action%201st%20Edition%20by%20Peter%20Harrington%20-%202012%5D.pdf>