Principles of good explanations (15 min)

1. Concepts then labels, not the other way around

The first explanation start with an analogy for the concept (and the label is left until the very end):

Machine learning algorithms, like an airplane’s cockpit, typically involve a bunch of knobs and switches that need to be set.

In the second explanation, the first sentence is wasted on anyone who doesn’t already know what “hyperparameter tuning” means:

Grid search is the process of performing hyper parameter tuning in order to determine the optimal values for a given model.

The effectiveness of these different statements depend on your audience.

2. Bottom-up explanations

The Curse of Knowledge leads to top-down explanations:

When you know something well, you think about things in the context of all your knowledge.

Those lacking the context, or frame of mind, cannot easily understand.

3. New ideas in small chunks

4. Reuse your running examples

5. Approach from all angles

6. When experimenting, show the results asap

7. Interesting to you != useful to the reader (aka it’s not about you)

Graphical user interface, text, application

Description automatically generated