{p r o g r a m m i n g}

Introduction to Machine Learning Tools

August 12th, 2020

Purpose of the workshops

- Hands-on experience with machine learning
- Small end-to-end projects
- Inspire, learn new things and have fun!

Introduction to Jupyter Notebook

What is it?

- A very popular and powerful tool that combines:
  - Code
  - Rich text
  - Images
  - Mathematical equations
  - Plots
  - Interactive figures and widgets

...and much more, into a single document.

Introduction to Jupyter Notebook

Let's try it out!

1. Download .ipynb file from https://github.com/mykys
2. Open the file in https://jupyter.org/try

Introduction to Jupyter Notebook

Exercise

1. **Add new cell**
    a. [+]
    b. esc + a
    c. esc + b
2. **Remove cell**
    a. [scissor]
    b. esc + dd
3. **Run cell**
    a. Shift + enter

scikit-learn

Why use scikit-learn?

- A very popular library for machine learning
- Developed by a large community of developers and machine learning experts
- High quality and easy to use implementations of popular algorithms
- Really good documentation

pandas

Why use pandas?

- Tool for data analysis and data manipulation
- Fast (on small data), powerful, flexible and easy to use
- Commonly used in the industry