

**Applied Data Analytics**

**Basic Python**

**Importing Modules**

Hans-Martin von Gaudecker and Aapo Stenhammar

# Contents

- What are libraries?
- Different ways to import libraries or parts of libraries
- Typical errors when importing

# Third party libraries

- Python is a general purpose programming language
- The base language you have seen so far is extended by libraries
  - Standard library (e.g. datetime)
  - Third party libraries (e.g. pandas, plotly)
- Libraries need to be imported to use them (and third party libraries need to be installed)

# Different ways to import

```
# Import entire library and rename it
import pandas as pd
```

```
#####
# Remaining things are just for
# being able to read others' code
#####
```

```
# Import an entire library
import pandas
```

```
# Import one function / object
from pandas import Series
```

```
# Import everything from a library
from pandas import *
```

1. All that is needed in this course

- **pandas** (pd)
- **plotly.express** (px)
- **plotly.graph\_objects** (go)

2. Many functions needed, no convention

3. If one needs one-three specific things

4. Never, ever use

# What could go wrong?

```
import paaaaaandas as pd
```

```
-----  
ModuleNotFoundError
```

```
Traceback (most recent call last)
```

```
Cell In[1], line 1
```

```
----> 1 import paaaaaandas as pd
```

```
ModuleNotFoundError: No module named 'paaaaaandas'
```

- Meaning: The library you asked for is not found
- Do you have a typo in the library name?
- Is the library installed in your environment?