

# Data Visualization

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HANDS-ON VISUALIZATIONS IN PYTHON

# Required Python libraries

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We will be using the libraries Plotly and Dash within a Jupyter notebook

- numpy==1.19.3 (1.19.4 does not work on Windows)
- pandas==1.2.0
- plotly==4.14.1
- ipywidgets==7.6.2
- dash==1.18.1
- jupyterlab==2.2.1 (newer versions do not work with dash)
- jupyter-dash==0.3.1
- pywin32==228 (on Windows, needs to be installed via conda)

# Installation

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Create a new Conda environment and install the packages as shown below (example working on Windows 10)

```
conda create --name py38viz python=3.8
```

```
activate py38viz
pip install numpy==1.19.3
pip install pandas
pip install plotly
Pip install ipywidgets
pip install dash
pip install jupyterlab==2.2.0
pip install jupyter-dash
pip uninstall pywin32 -y
conda install pywin32 -y
```

# Verify the installation

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Run Jupyter notebook

[jupyter notebook](#)

Execute the code in [TestPlotly.ipynb](#) and [TestDash.ipynb](#)

**Random datastream**

