Introduction to NumPy

Eirik and Stine

■ NumPy = Numerical Python

- NumPy = Numerical Python
- The fundamental package for scientific computing with Python

- NumPy = Numerical Python
- The fundamental package for scientific computing with Python
- Default library for linear algebra and numerical computing in Python

- NumPy = Numerical Python
- The fundamental package for scientific computing with Python
- Default library for linear algebra and numerical computing in Python
- One of the core libraries of the Python data science stack (also called the NumPy-stack)



- Compatible: NumPy is used in many other libraries:
 - MatPlotLib
 - Pandas
 - Tensorflow
 - scikit-learn
 - PyTorch

- Compatible: NumPy is used in many other libraries:
 - MatPlotLib
 - Pandas
 - Tensorflow
 - scikit-learn
 - PyTorch
- Simplicity: NumPy is (relatively) easy to use

- Compatible: NumPy is used in many other libraries:
 - MatPlotLib
 - Pandas
 - Tensorflow
 - scikit-learn
 - PyTorch
- Simplicity: NumPy is (relatively) easy to use
- Open Source: NumPy is free to use (compared to MATLAB, Mathematica, and Maple)

- Compatible: NumPy is used in many other libraries:
 - MatPlotLib
 - Pandas
 - Tensorflow
 - scikit-learn
 - PyTorch
- Simplicity: NumPy is (relatively) easy to use
- Open Source: NumPy is free to use (compared to MATLAB, Mathematica, and Maple)
- Mathematically Mature: NumPy implements random number generators, linear algebra routines, Fourier transforms, and much more.

- Compatible: NumPy is used in many other libraries:
 - MatPlotLib
 - Pandas
 - Tensorflow
 - scikit-learn
 - PyTorch
- Simplicity: NumPy is (relatively) easy to use
- Open Source: NumPy is free to use (compared to MATLAB, Mathematica, and Maple)
- Mathematically Mature: NumPy implements random number generators, linear algebra routines, Fourier transforms, and much more.
- Performant: NumPy is fast as the core of NumPy is well-optimized C code

Supplementary Material