External Resources, Videos and Talks

For written tutorials, see the **Tutorial section** of the documentation.

New to Scientific Python?

For those that are still new to the scientific Python ecosystem, we highly recommend the <u>Python Scientific Lecture Notes</u>. This will help you find your footing a bit and will definitely improve your scikit-learn experience. A basic understanding of NumPy arrays is recommended to make the most of scikit-learn.

External Tutorials

There are several online tutorials available which are geared toward specific subject areas:

- Machine Learning for NeuroImaging in Python
- Machine Learning for Astronomical Data Analysis

And a list of more general tutorials:

 A Bit of Data Science and Sklearn, a 16 part tutorial that goes over the essential parts of sklearn used in data science.

Conference Talks

- An introduction to scikit-learn <u>Part I</u> and <u>Part II</u> at Scipy 2013 by <u>Gael Varoquaux</u>, <u>Jake Vanderplas</u> and <u>Olivier Grisel</u>. Notebooks on <u>github</u>.
- Introduction to scikit-learn by Gael Varoquaux at ICML 2010
 - A three minute video from a very early stage of the scikit, explaining the basic idea and approach we are following.
- Introduction to statistical learning with scikit-learn by Gael Varoquaux at SciPy 2011
 - An extensive tutorial, consisting of four sessions of one hour. The tutorial covers the basics of machine learning, many algorithms and how to apply them using scikit-learn.
- <u>Statistical Learning for Text Classification with scikit-learn and NLTK</u> (and <u>slides</u>) by <u>Olivier Grisel</u> at PyCon 2011
 - Thirty minute introduction to text classification. Explains how to use NLTK and scikit-learn to solve real-world text classification tasks and compares against cloud-based solutions.
- Introduction to Interactive Predictive Analytics in Python with scikit-learn by Olivier Grisel at PyCon 2012
 - o 3-hours long introduction to prediction tasks using scikit-learn.
- scikit-learn Machine Learning in Python by Jake Vanderplas at the 2012 PyData workshop at Google
 - Interactive demonstration of some scikit-learn features. 75 minutes.
- scikit-learn tutorial by Jake Vanderplas at PyData NYC 2012
 - Presentation using the online tutorial, 45 minutes.