# Data Analysis in Python

Python is a high-level dynamic object-oriented programming language. It is easy to learn, intuitive, well documented, very readable and extremely powerful. Python is packaged with an impressive standard library following the so called "batteries included" philosophy. Together with the large number of additionally available scientific packages like NumPy, SciPy, pandas, matplotlib, etc., Python becomes a very well suited programming language for data analysis.

One more thing to mention is the possibility to easily integrate C, C++ or even FORTRAN code into Python, which can be used to optimize computational bottlenecks by moving the code to a lower-level compiled language. Cython, a compiler for Python code, is one of the standard ways to transform Python code into fast compiled low-level extensions and to interface already existing C/C++ code.

This hands-on session introduces the pythonic way of programming, demonstrates the power of Python in data analysis and gives a brief glimpse of developing performant code in Python using Cython.

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**Track Classification:**   Modern Programming