

Python has a number of modules for different purposes

1. Sklearn- for data analysis & ML models
2. SciPy- for scientific calculations

SciPy is a scientific Python module

1. Open-source scientific library in Python to solve complex math, statistical, and scientific problems
2. This is a built-in Numpy module used for processing n-dimensional arrays. The functions of a module are accessible by importing it. If you import Scipy it means that numpy is also available
3. It has a strong user community- where they extend the module by adding new library functions
4. Supports math functions like integration, differential equations, Fourier series, linear algebra functions, stat functions, functions for signal processing, optimizations, etc

Scipy has a number of submodules for different areas

- Scipy.cluster to perform grouping/clustering of datapoints
- Scipy.constants for all math, time, measures
- Scipy.fftpack for fourier transformations
- Scipy.integrate for integration
- Scipy.interpolation for interpolation
- Scipy.linalg for matrix operations like multiplication, inverse, determinant
- Scipy.ndimage for n-dimensional image
- Scipy.optimize for optimization functions like least squares
- Scipy.signal for signal processing
- Scipy.statistics for stat function like kurtosis, f score, SD, mean etc