



- Primer release 2001.
- Última versión 1.8.0 5 febrero 2022

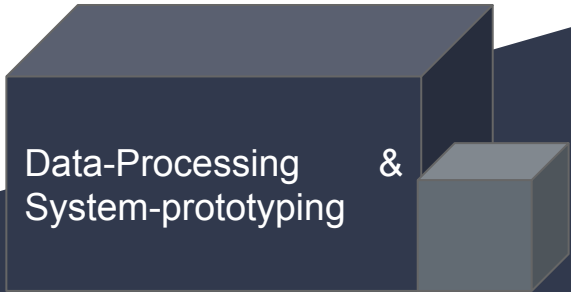
Datos a 5 de marzo de 2022



SciPy

Utilidad principal

Creada como una *extensión de Numpy*,
está compuesto de *algoritmos matemáticos (optimización,
integración, interpolación, problemas de valores propios,
ecuaciones algebraicas, ecuaciones diferenciales,
estadísticas)* y otras funciones convenientes que proveen
al usuario de *comandos de alto nivel* y clases para la
manipulación y visualización de datos.



Data-Processing &
System-prototyping

2001 - ver. 1.0
7/2022 - ver. 1.9

Documentación

<https://docs.scipy.org/doc/>

- **Special functions (`scipy.special`)** the definition of numerous special functions of mathematical physics.
- **Integration (`scipy.integrate`)** sub-package provides several integration techniques including an ordinary differential equation integrator.
- **Optimization (`scipy.optimize`)** provides several commonly used optimization algorithms.
- **Interpolation (`scipy.interpolate`)** There are several general interpolation facilities available for data in 1, 2, and higher dimensions
- **Fourier Transforms (`scipy.fft`)** Fourier analysis is a method for expressing a function as a sum of periodic components, and for recovering the signal from those components.
- **Signal Processing (`scipy.signal`)** The signal processing toolbox currently contains some filtering functions, a limited set of filter design tools, and a few B-spline interpolation algorithms for 1- and 2-D data.
- **Linear Algebra (`scipy.linalg`)** Contains all the functions in `numpy.linalg`. plus some other more advanced ones not contained in `numpy.linalg`.
- **Sparse eigenvalue problems with ARPACK.** Is a Fortran package which provides routines for quickly finding a few eigenvalues/eigenvectors of large sparse matrices.
- **Compressed Sparse Graph Routines (`scipy.sparse.csgraph`)**
- **Spatial data structures and algorithms (`scipy.spatial`)** Can compute triangulations, Voronoi diagrams, and convex hulls of a set of points, by leveraging the `Qhull` library.
- **Statistics (`scipy.stats`)** Discrete Statistical Distributions, Continuous Statistical Distributions
- **Multidimensional image processing (`scipy.ndimage`)** provides a number of general image processing and analysis functions that are designed to operate with arrays of arbitrary dimensionality.
- **File IO (`scipy.io`)** This is the package from which `loadmat`, `savemat`, and `whosmat` are imported.

Repo e issues

Más comentado:

Mejora: se incorpora un conjunto de funciones para crear y evaluar el diseño de experimentos cuasi-Monte Carlo.

Mejora: se integra métodos para muestreo de distribuciones continuas y discretas univariadas de la biblioteca UNU.RAN

Más reciente:

BUG: Memory Error in `scipy.sparse.splu`

Documentación: Extensiones SciPy para estilo de código y pautas de cadenas de documentación.