Oscar Cortez

01

PYTHON LIBRARIES FOR ENGINEERS

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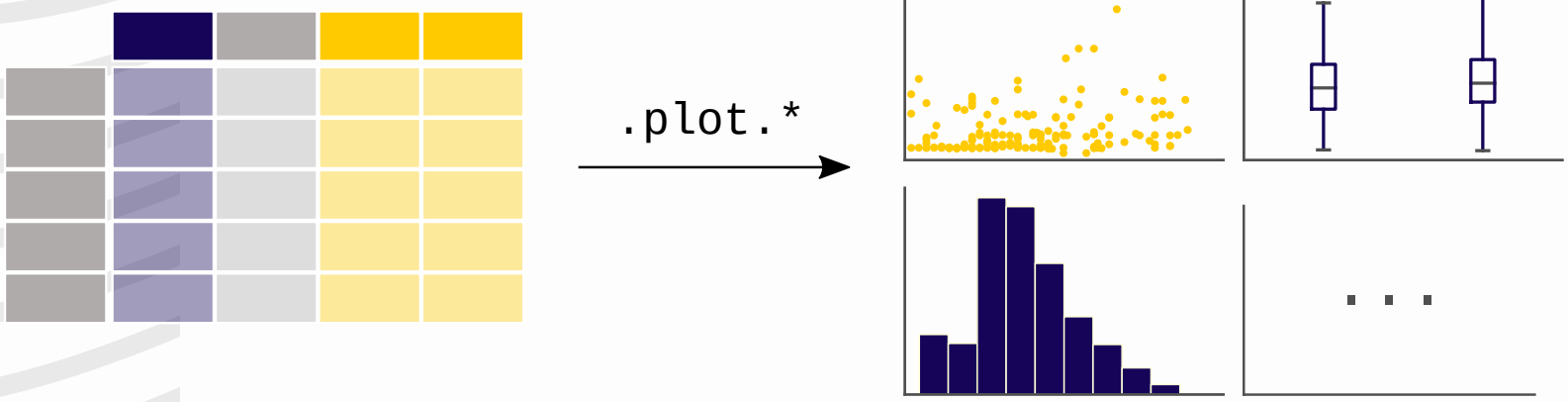
pandas

Streamline data manipulation and analysis using Pandas. Essential for data scientists and engineers, this library turns complex datasets into clear insights efficiently.



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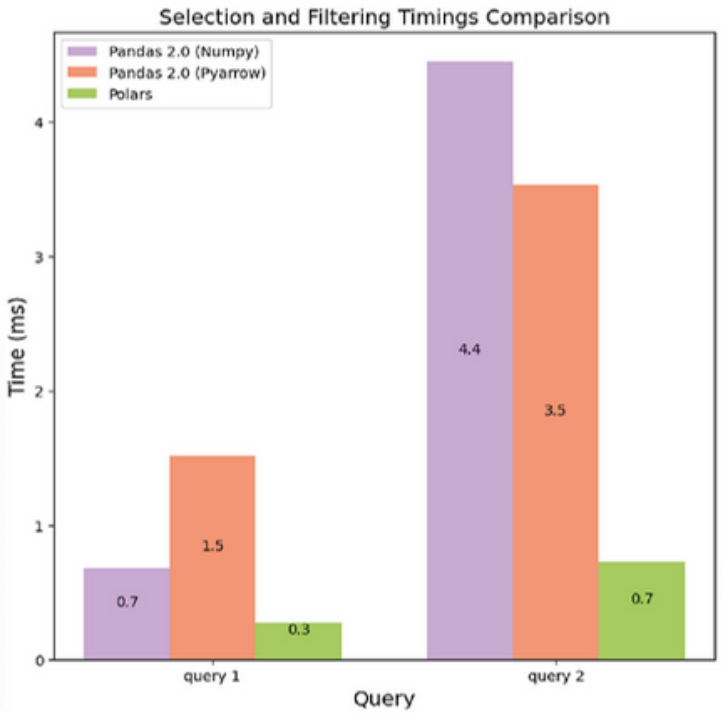
Polars

Handle large datasets at high speed with Polars. Designed for efficiency, it optimizes data analysis tasks, outperforming traditional methods.



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SimPy

To simulate and analyze real-world processes. Ideal for operational research, it brings abstract concepts to tangible simulations.

```
Machine shop
Machine shop results after 4 weeks
Machine 0 made 3251 parts.
Machine 1 made 3273 parts.
Machine 2 made 3242 parts.
Machine 3 made 3343 parts.
Machine 4 made 3387 parts.
Machine 5 made 3244 parts.
Machine 6 made 3269 parts.
Machine 7 made 3185 parts.
Machine 8 made 3302 parts.
Machine 9 made 3279 parts.
```

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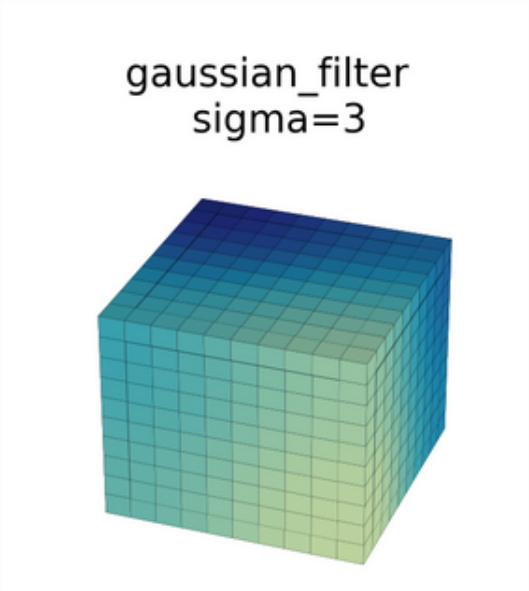
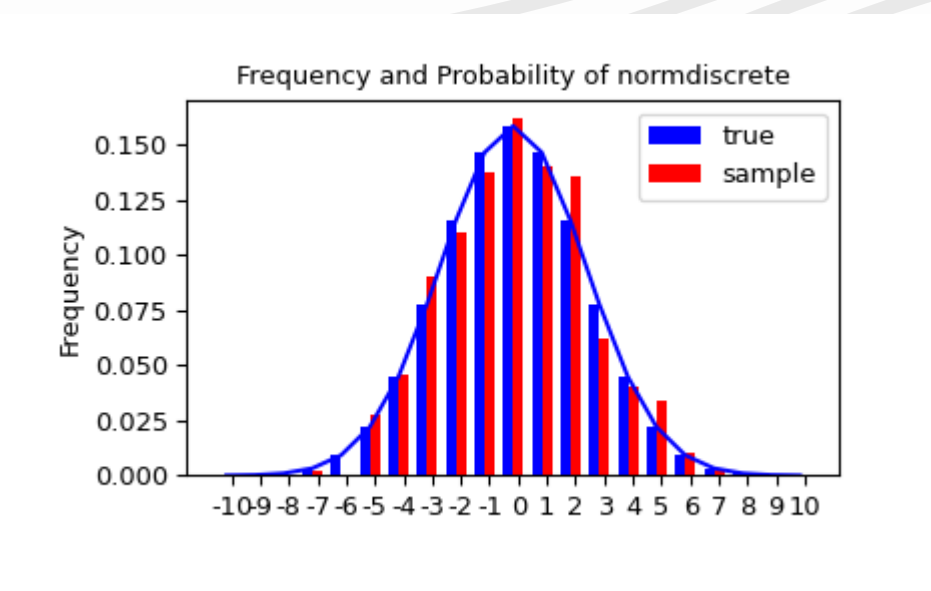
SciPy

Leverage SciPy for scientific and technical computing. A must-have for solving mathematical, scientific, and engineering challenges effectively.





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SymPy

Transform Python into a mathematical powerhouse with SymPy. Perform symbolic computations easily, perfect for academic and research applications.

```python
from sympy import Function, dsolve, Derivative, checkodesol
from sympy.abc import x
y = Function('y')
# Solve the ODE
result = dsolve(Derivative(y(x), x, x) + 9*y(x), y(x))
result
Eq(y(x), C1*sin(3*x) + C2*cos(3*x))
# Check that the solution is correct
checkodesol(Derivative(y(x), x, x) + 9*y(x), result)
(True, 0)
```

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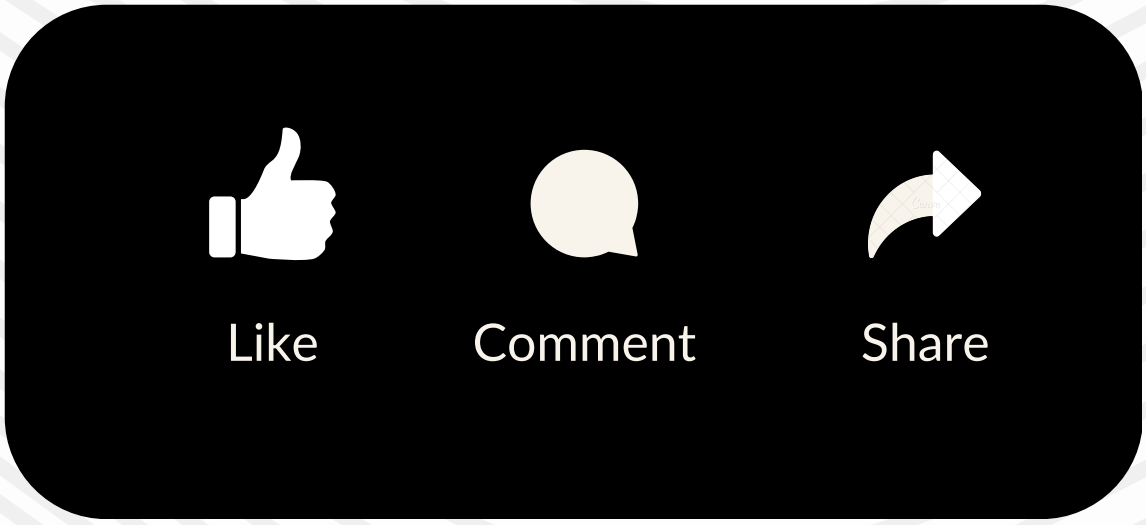
Did you like it?

follow for more!



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