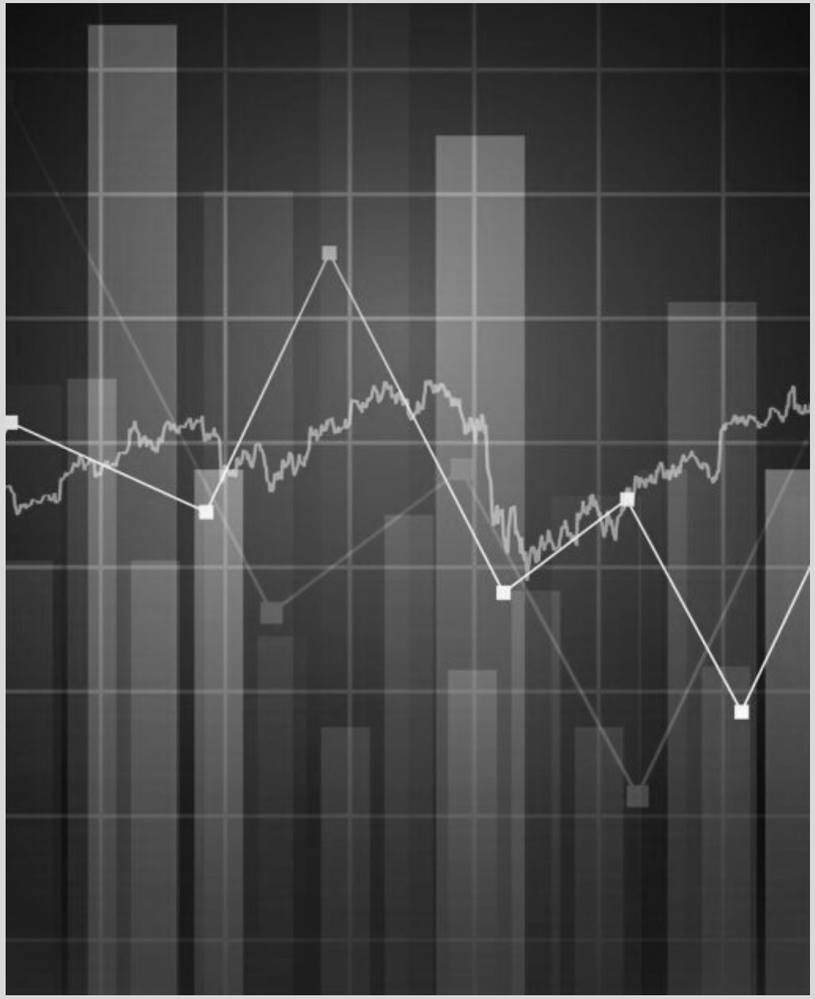
IRIS-HEP

FEATURES EXTENSION, INCLUSION & RECTIFICATION FOR BOOST-HISTOGRAM



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Background

Boost-Histogram

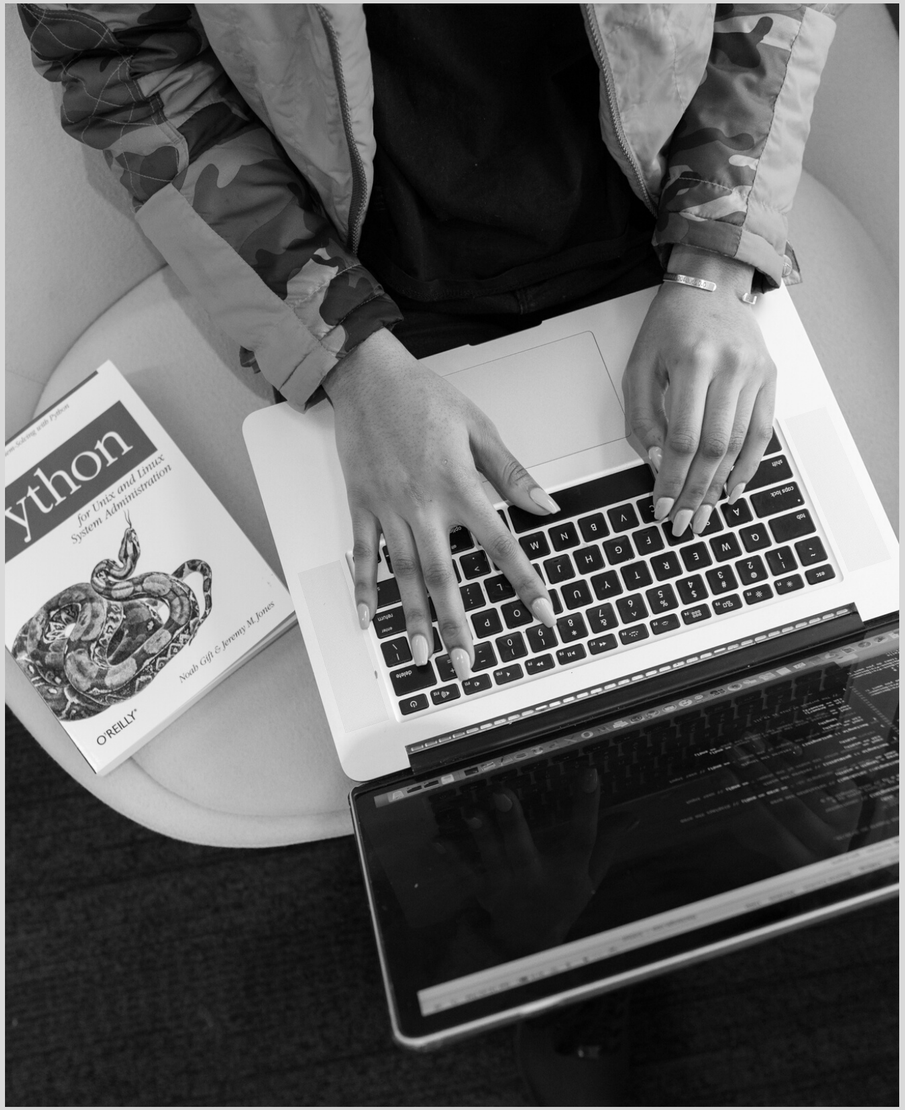
Boost-histogram is a Python package that provides Python bindings for Boost.Histogram (a C++ library statistical library).

Usage

It has proven to be transformative in producing Histograms while providing plotting tools, histogram operations, axes manipulation, etc.

Achievements

Boost-histogram was recently even included in the 0.20 release of Pyodide (a WebAssembly port of CPython)!



Goals | Improvements

The major aim of the project proposal is to extend the development of boost-histogram tool through new features additions, core function changes, edge-case covers, bug fixes and more exhaustive documentation.

1. Visualize/portray difference between histograms
2. Allow slicing on axes
3. Disallow non-integer arg. input for specific storages
4. Add scalar support for histogram fill function
5. Add operators for weighted histograms / accumulators
6. Add support for scaling and addition for mean views
7. Add collector and efficiency accumulator
8. Add in-doc notebook and extend the documentation

IRIS-HEP Fellows
Lightning Talks

Thank you!

I would now take any questions you may have.