

# Nathan J. Goldbaum

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Homepage: [ngoldbaum.github.io](https://ngoldbaum.github.io)

## Major Open Source Contributions

### NumPy

<https://numpy.org>

- Foundational library for multidimensional arrays in Python.
- Joined maintainer team in 2023.
- Author of the variable-width string array data type added in NumPy 2.0 and described in NEP 55.
- Led effort to support free-threaded Python in NumPy 2.1 and primary maintainer for the free-threaded build.
- More than 200 merged pull requests. Thirteenth most prolific all-time contributor by commit count.

### PyO3

<https://pyo3.rs>

- The Rust bindings for the Python interpreter.
- Joined maintainer team in 2024.
- Led effort to support free-threaded Python in PyO3 0.23 and primary maintainer for the free-threaded build.
- More than 40 merged pull requests.

### PyTorch

<https://pytorch.org>

- Contributed the `__torch_function__` mechanism for extending PyTorch in downstream libraries and many bugfixes.
- 20 merged pull requests.

### unyt

<https://github.com/yt-project/unyt/>

- A Python library for working with data that has physical units.
- Primary author and original maintainer.
- Extensively documented and tested Python codebase that can turn a Python prompt into a full-featured calculator for problems with physical units.
- Used in production for scientific and engineering data processing pipelines.

## Experience

### Quansight Labs, Senior Software Engineer

November 2022 - Present

- Improving and maintaining the scientific Python ecosystem.

### Quansight, Software Engineer

October 2019 – March 2020

- Worked with PyTorch team to handle community-reported bugs and feature requests.

### Recurse Center

May 2019 – August 2019

- Gained facility in the Rust programming language by blogging about self-directed learning experiences.

### National Center for Supercomputing Applications

Research Scientist

May 2017 – April 2019

Postdoctoral Researcher

August 2015 – April 2017

- Primary maintainer for The yt Project, an open toolkit for working with 3D simulation data.

## Education

### University of California Santa Cruz

Ph.D. Astronomy & Astrophysics

August 2011 – July 2015

### University of Colorado Boulder

B.A. Physics, *Summa Cum Laude*

August 2005 – 2009