



The Latest on Open Source Tools for GIS

NSGIC Innovation Summit

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Principal / Co-Founder
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makepath

**makepath is a spatial data science company
based in Austin, TX**

Open Source Development

Data Visualization

Geospatial Analysis

GIS is
Multidisciplinary

Open Source Communities:

- Connect disciplines
- Connect individuals
- Produce transparent tools
- Distribute maintenance burden

Find out what
you don't know

Some tools you
may not know,
but should...



**Xarray
Spatial**

Website: <http://xarray-spatial.org>

GitHub: <https://github.com/makepath/xarray-spatial>

Maintainers: Brendan Collins, Jim Bednar, Thuy Do, Sergio Rey and many others



Website: <https://datashader.org>

GitHub: <https://datashader.org>

Maintainers: Peter Wang, Jim Bednar, Philipp Rudiger, Brendan Collins, and many others

Open Source is Everywhere

makepath

Z by HP ▾

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ZBook Studio

The ultimate choice for mobile data scientists and business intelligence professionals. Ideal for working with 85 million row databases.



Z4 Desktop

The perfect choice for data wrangling, cleaning, and visualization. Ideal for working with 2 to 3 billion row databases.



GitHub: <https://github.com/holoviz/spatialpandas>

Maintainers: Jon Mease, Jim
Bednar, Philipp Rudiger and
Brian Larsen



Website: <https://geopandas.org>

GitHub: <https://github.com/geopandas/geopandas>

Maintainers: Joris Van den Bossche,
Martin Fleischmann and many others

Shapely

Website: <https://shapely.readthedocs.io/en/stable/manual.html>

GitHub:

<https://github.com/Toblerity/Shapely>

Maintainers: Sean Gillies, Mike Taves, Joris Van den Bossche and many others



For more info: <https://numba.pydata.org>

GitHub: <https://github.com/numba>

Maintainers: Travis Oliphant,, Siu Kwan Lam,
Stuart Archibald, Stanley Seibert, Ehsan
Totoni, Todd Anderson and many others



CuPy

Website: <https://cupy.dev>

GitHub: <https://github.com/cupy>

Maintainers: Ryosuke Okuta, Yuya Unno, Leo Fang and many others



Website: <https://dask.org>

GitHub: <https://github.com/dask>

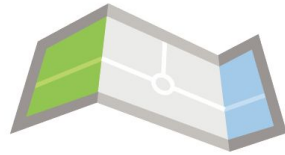
Maintainers: Matthew Rocklin, Tom Augspurger, James Bourbeau, Jim Crist-Harif and many others



Website: <https://gdal.org>

GitHub: <https://github.com/OSGeo/gdal>

Maintainers: Frank Warmerdam,
Even Rouault, Kurt Schwehr and
many others



mapshader

GitHub: <https://github.com/makepath/xarray-spatial>

Maintainers: Brendan Collins and Filipe Limberger



Website:

<https://numpy.org/>

GitHub: <https://github.com/numpy/numpy>

Maintainers: Travis Oliphant, David Cournapeau and many others



Website: <https://leafletjs.com>

GitHub: <https://github.com/Leaflet>

Maintainers: Vladimir Agafonkin, Iván Sánchez Ortega and many others



Website: <http://xarray.pydata.org/en/stable/>

GitHub: <https://github.com/pydata/xarray>

Maintainers: Stephan Hoyer, Joe Hamman,
Maximilian Roos and many others

Rasterio

Website: <https://rasterio.readthedocs.io/en/latest/>

GitHub: <https://github.com/mapbox/rasterio>

Maintainers: Sean Gillies and many others



Website: <https://holoviews.org/>

GitHub: <https://github.com/holoviz/holoviews>

Maintainers: Philipp Rudiger, Jean-Luc Stevens and many others



Website: <https://bokeh.org>

GitHub: <https://github.com/bokeh/bokeh>

Maintainers: Bryan Van de Ven, Mateusz Paprocki and many others



PANGEO

A community platform for Big Data geoscience

Website: <https://pangeo.io>

GitHub: <https://github.com/pangeo-data/pangeo>

Maintainers: Ryan Abernathey, Joe Hamman and many others

Q & A

Thank you.

Enjoy the rest of the
summit!

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