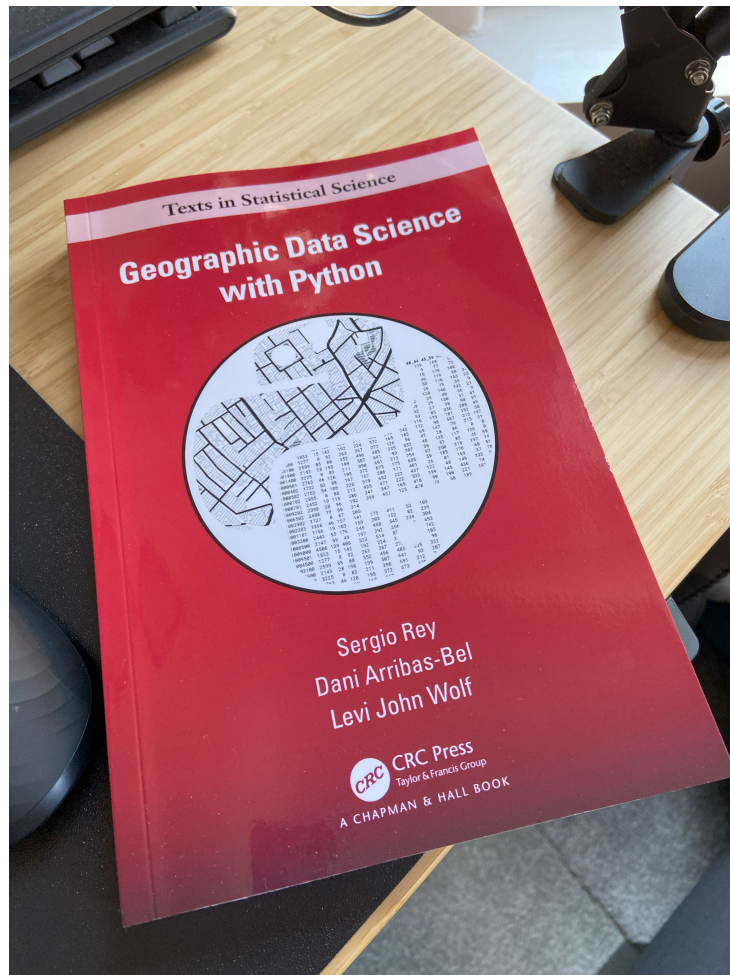


Geographic Data Science with Python

The Book

Dani Arribas-Bel

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- [!\[\]\(746d018fdf6ab02bf5fb7681133e8b29_img.jpg\)](#)
- <https://github.com/gdsbook/book>



The Authors



@sreyog

Serge Rey



@darribas

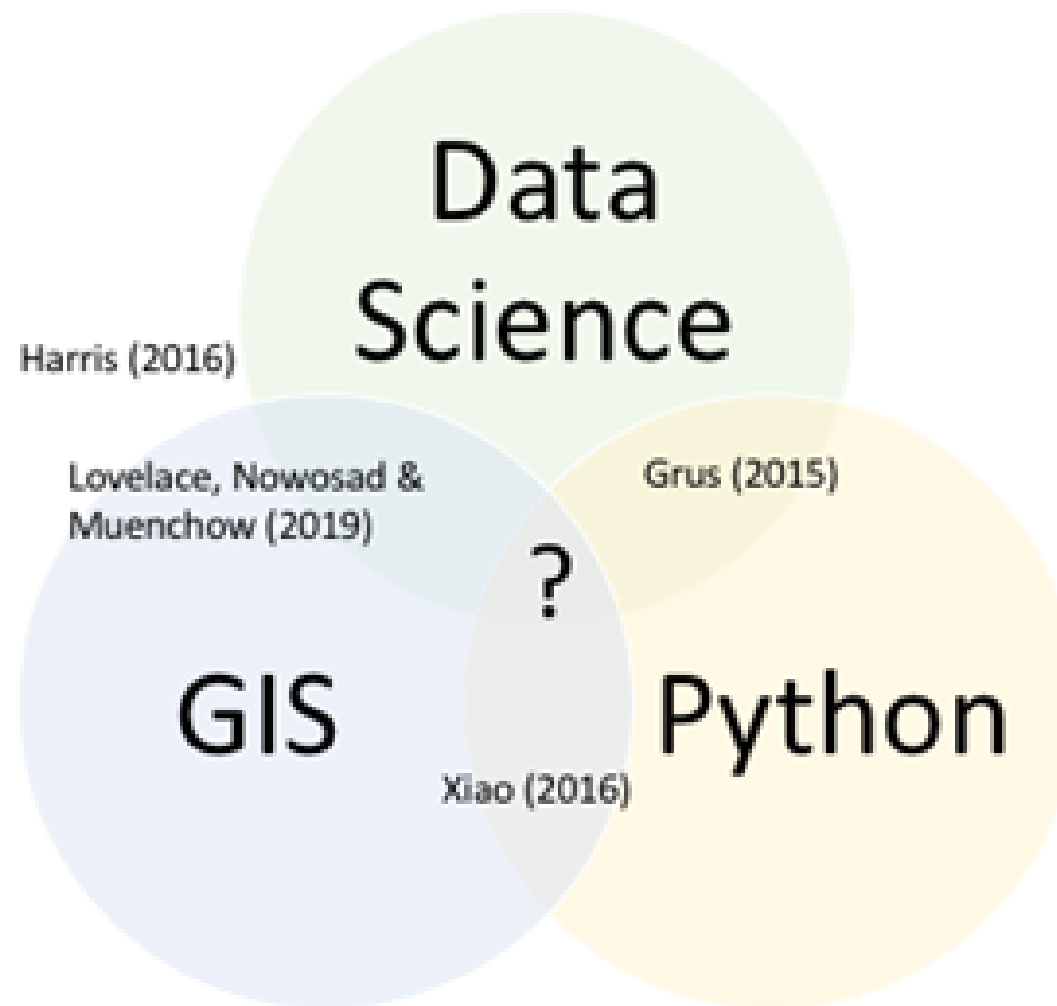
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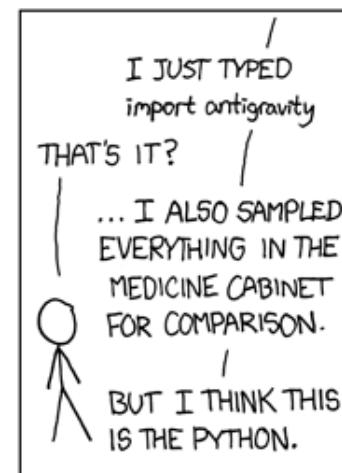
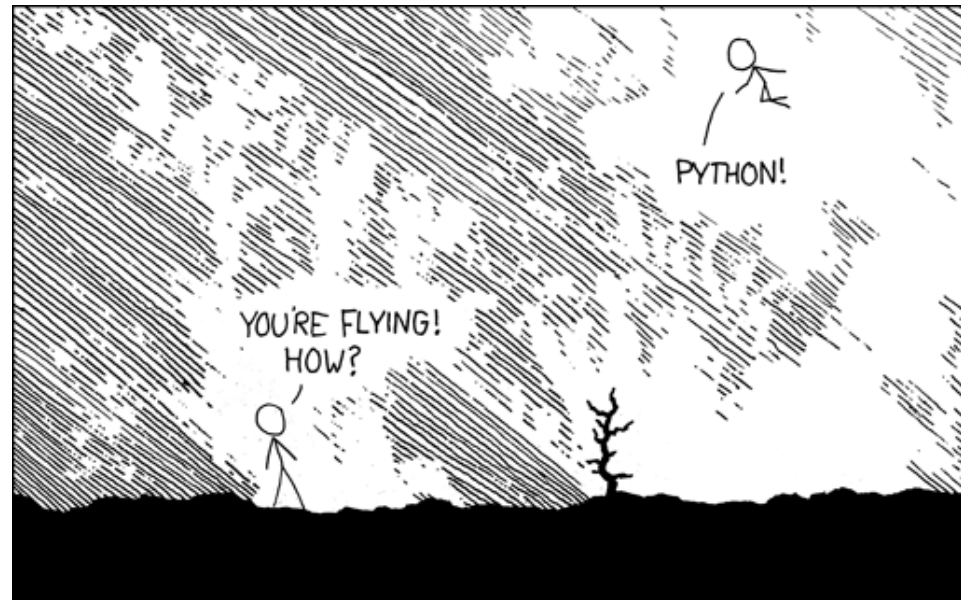
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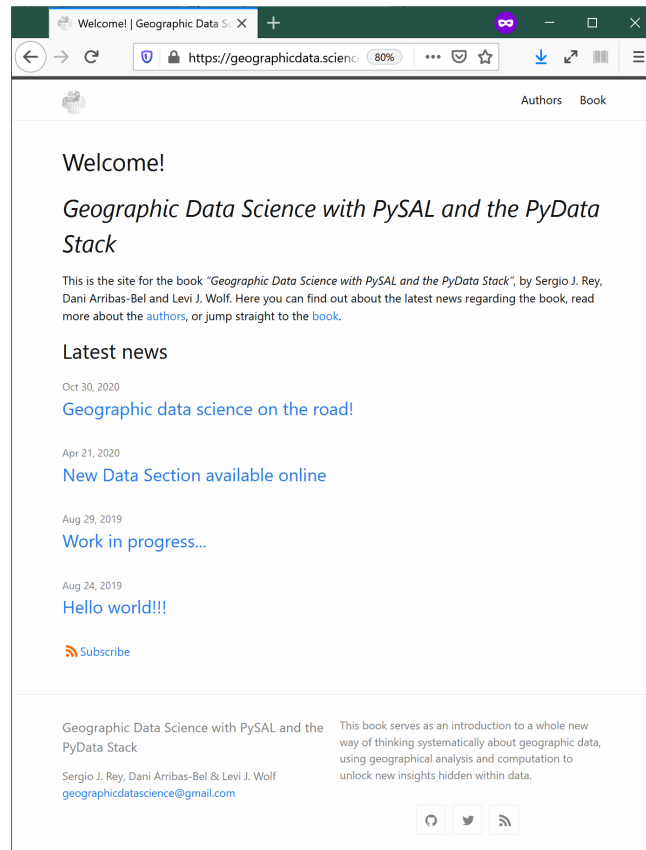
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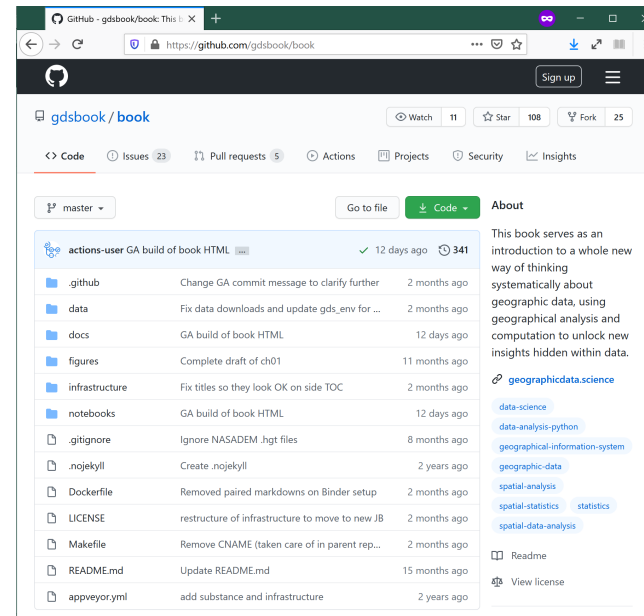
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master

File	Commit Message	Time
.github	Change GA commit message to clarify further	2 months ago
data	Fix data downloads and update gds_env for ...	2 months ago
docs	GA build of book HTML	12 days ago
figures	Complete draft of ch01	11 months ago
infrastructure	Fix titles so they look OK on side TOC	2 months ago
notebooks	GA build of book HTML	12 days ago
.gitignore	Ignore NASADEM .hgt files	8 months ago
.nojekyll	Create .nojekyll	2 years ago
Dockerfile	Removed paired markdowns on Binder setup	2 months ago
LICENSE	restructure of infrastructure to move to new JB	2 months ago
Makefile	Remove CNAME (taken care of in parent rep...	2 months ago
README.md	Update README.md	15 months ago
appveyor.yml	add substance and infrastructure	2 years ago

actions-user GA build of book HTML 12 days ago 341

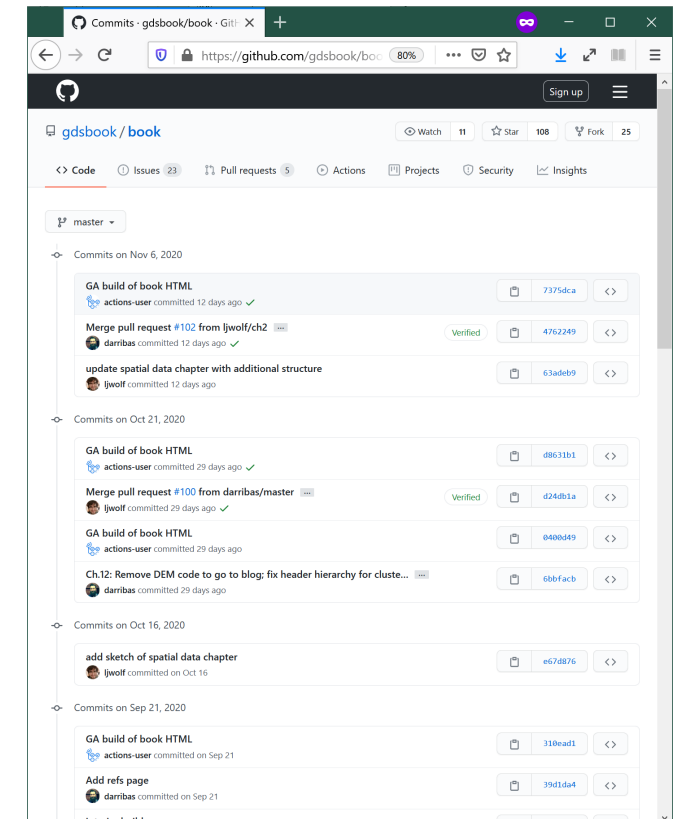
about

This book serves as an introduction to a whole new way of thinking systematically about geographic data, using geographical analysis and computation to unlock new insights hidden within data.

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Commits on Nov 6, 2020

- GA build of book HTML actions-user committed 12 days ago ✓ 73754c4
- Merge pull request #102 from ljwolf/ch2 darribas committed 12 days ago ✓ Verified 4762249
- update spatial data chapter with additional structure ljwolf committed 12 days ago 63adeb9

Commits on Oct 21, 2020

- GA build of book HTML actions-user committed 29 days ago ✓ 08631b1
- Merge pull request #100 from darribas/master ljwolf committed 29 days ago ✓ Verified d24db1a
- GA build of book HTML actions-user committed 29 days ago 0406d49
- Ch.12: Remove DEM code to go to blog; fix header hierarchy for cluste... darribas committed 29 days ago 6bbfabc

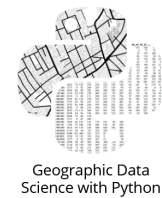
Commits on Oct 16, 2020

- add sketch of spatial data chapter ljwolf committed on Oct 16 e67d876

Commits on Sep 21, 2020

- GA build of book HTML actions-user committed on Sep 21 310ea81
- Add refs page darribas committed on Sep 21 39d1da4
- interim build

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Airports

Brexit

Countries

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Mexico

```
from descartes import PolygonPatch
f,ax = plt.subplots(1,1, figsize=(9,9))

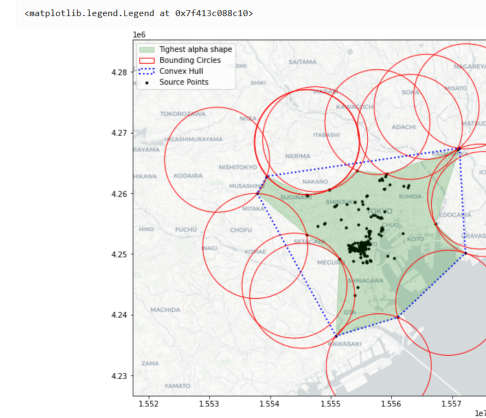
# Plot a green alpha shape
ax.add_patch(PolygonPatch(alpha_shape, edgecolor='green',
                          facecolor='green', alpha=.2, label = 'Tightest alpha shape'))

# Include the points for our prolific user in black
ax.scatter(*coordinates.T, color='k', marker='.', label='Source Points')
# Add a basemap
ax.imshow(basemap, extent=basemap_extent)

# plot the circles forming the boundary of the alpha shape
for i, circle in enumerate(circles):
    # only label the first circle of its kind
    if i == 0:
        label = 'Bounding Circles'
    else:
        label = None
    ax.add_patch(plt.Circle(circle, radius=alpha, facecolor='none', edgecolor='r', label=label))

# add a blue convex hull
ax.add_patch(plt.Polygon(convex_hull.vertices,
                        closed=True,
                        edgecolor='blue', facecolor='none',
                        linestyle='-', linewidth=2,
                        label='Convex Hull'))

plt.legend()
```



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Location, Location, Location

Visualization

Centrography

Randomness & clustering

Identifying clusters

Conclusion

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Merge pull request #100 from darribas/master

https://github.com/gdsbook/book/runs/1285952518?cl=80%

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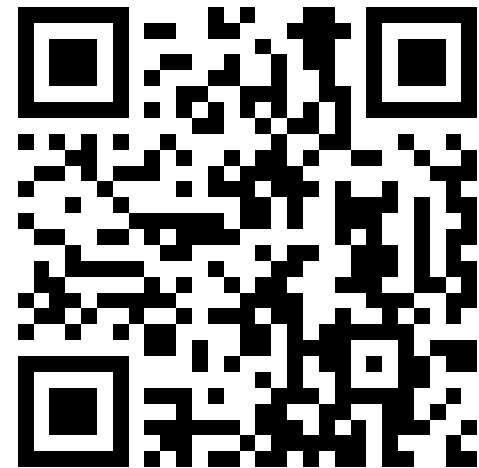
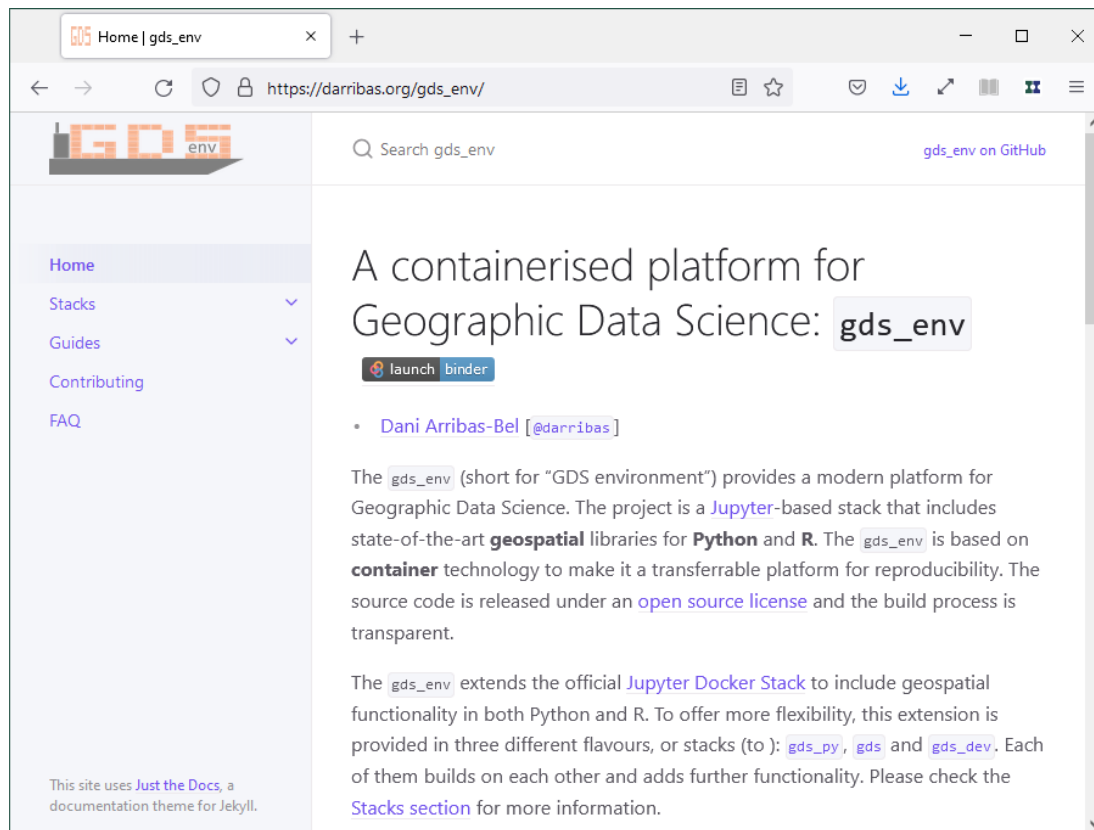
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Build Jupyter book on: push

build-html-and-deploy succeeded 29 days ago in 2m 50s

- Set up job 4s
- Checkout 13s
- Setup Miniconda 1m 59s
- Build HTML 29s
- Commit files 0s
- Push changes 4s
- Post Setup Miniconda 1s
- Post Checkout 0s
- Complete job 0s

Runs *anywhere*...



darribas.org/gds_env

Demo



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