Teaching Reproducible Spatial Analysis in R

Angela Li
University of Chicago
Center for Spatial Data Science
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“R Spatial Advocate”
“No one’s done your job before”

- My boss

@CivicAngela
R Spatial Workshop Notes

Spring Quarter 2019

Angela Li

Introduction

This site contains workshop notes from the R Spatial Workshops. Workshops are held on Wednesdays at 10am running these workshops are to teach participants how to use R for spatial data analysis.

You are welcome to join us in Searle 240B to follow along. Bring a laptop to follow along.

Workshop Organization

Each chapter of this bookdown book represents a workshop and will be uploaded after the workshop so you can follow along.

The code for the image you provided is:

```r
ggplot() +
geom_sf(data = wards98, fill = "lightblue") +
geom_sf(data = centroids, color = "blue")
```
R Spatial

Spring Quarter

Angela Li

Introduction

This site contains workshop notes for the spatial data analysis workshops held by Civic Angels.

Workshop #1

Each chapter of this bookdown book represents material that will be uploaded after the workshop so you can review it later.

Raster Data

9 Introduction to Raster Data

Interpolation and Kriging

10 Introduction to Interpolation

11 Interpolation with Array of Things Data

So far, we've plotted data that was from the same original dataset. What if we want to add a layer with Chicago's waterways?
Pilot Workshops

“Here’s how to make this rate map...”
Pilot Workshops

“It doesn’t work for me...”
The order in which you give arguments to `st_intersects` matters! I always have to look it up, but for point-in-polygon, you want the polygon first, then the points.

Note: This is where projection is extremely important. If you get an error message that says:

```
Error: st_crs(x) == st_crs(y) is not TRUE
```

that probably means that you forgot to project one of your datasets. Check the CRS with both and fix it with `st_transform`.
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contributions back

Clarify difference between st_intersection() and st_intersects() #953

angela-li opened this issue on Jan 19 · 2 comments

angela-li commented on Jan 19

It's easy to get confused between st_intersection and st_intersects because their names are so similar. People often type "st_intersects" when "st_intersection" is what they intend. I propose adding a note in the function documentation for each regarding the other function.

Additionally, we could also add a note in the vignettes clarifying the differences between the two.
contributions back

@CivicAngela
it’s worth it!

@CivicAngela
thank you!
Learn Spatial Analysis
Online resources, tutorials, and more

The Center for Spatial Data Science at the University of Chicago is currently in the process of developing this site to share tutorials and resources for spatial analysis in R. This is an initiative started by Luc Anselin and currently led by Angela Li, R Spatial Advocate for the center.

Spatial analysis in the R ecosystem:

- Contributing to open source spatial packages in R, improving documentation for common packages, and developing new software where functionalities are missing.

Please check back frequently as this site will be updated while we develop new resources!

Blog Posts
- 7 May 2019 Introduction to Geospatial Raster Data Workshop Offered
- 30 April 2019 Spring Quarter Workshops

Events
- Workshop Schedules
- More events ➤

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spatialanalysis.github.io

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