

Week 1

UP221: Introduction to GIS and Spatial Data Science

Course zoom link for Winter Quarter 2025

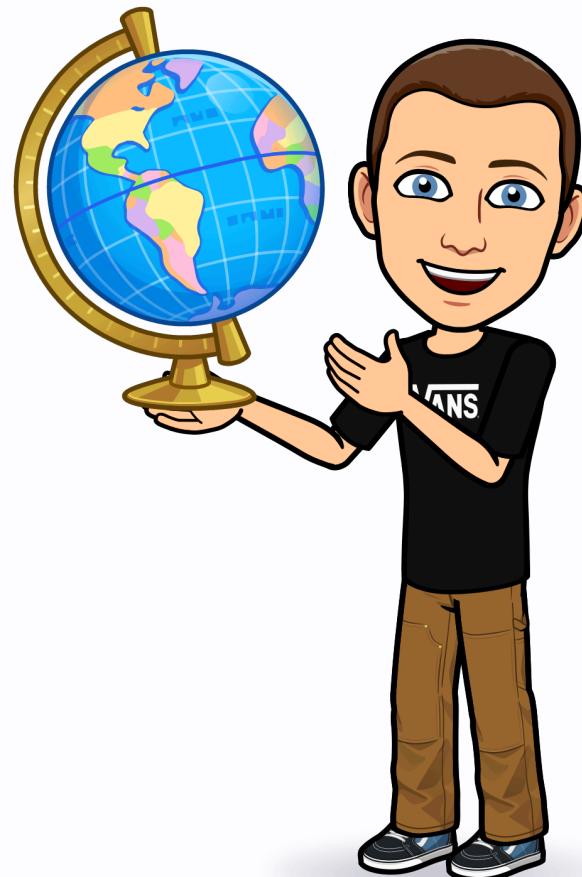
January 6, 2025



*Note that this course will be recorded



Hello!





Call me "Chris"



Chris Giamarino

After earning his bachelor's and master's degrees at New York University and Columbia in New York, Chris is working toward his PhD in Urban Planning at the University of California Los Angeles. Much of his work has focused on how architecture and public space design excludes skateboarders and houseless people and how that could change. While he works toward his degree, he has presented some of his research at [Pushing Boarders](#) in Sweden and plans to pursue a career in academia. Give it up for skaters helping skaters through policy.



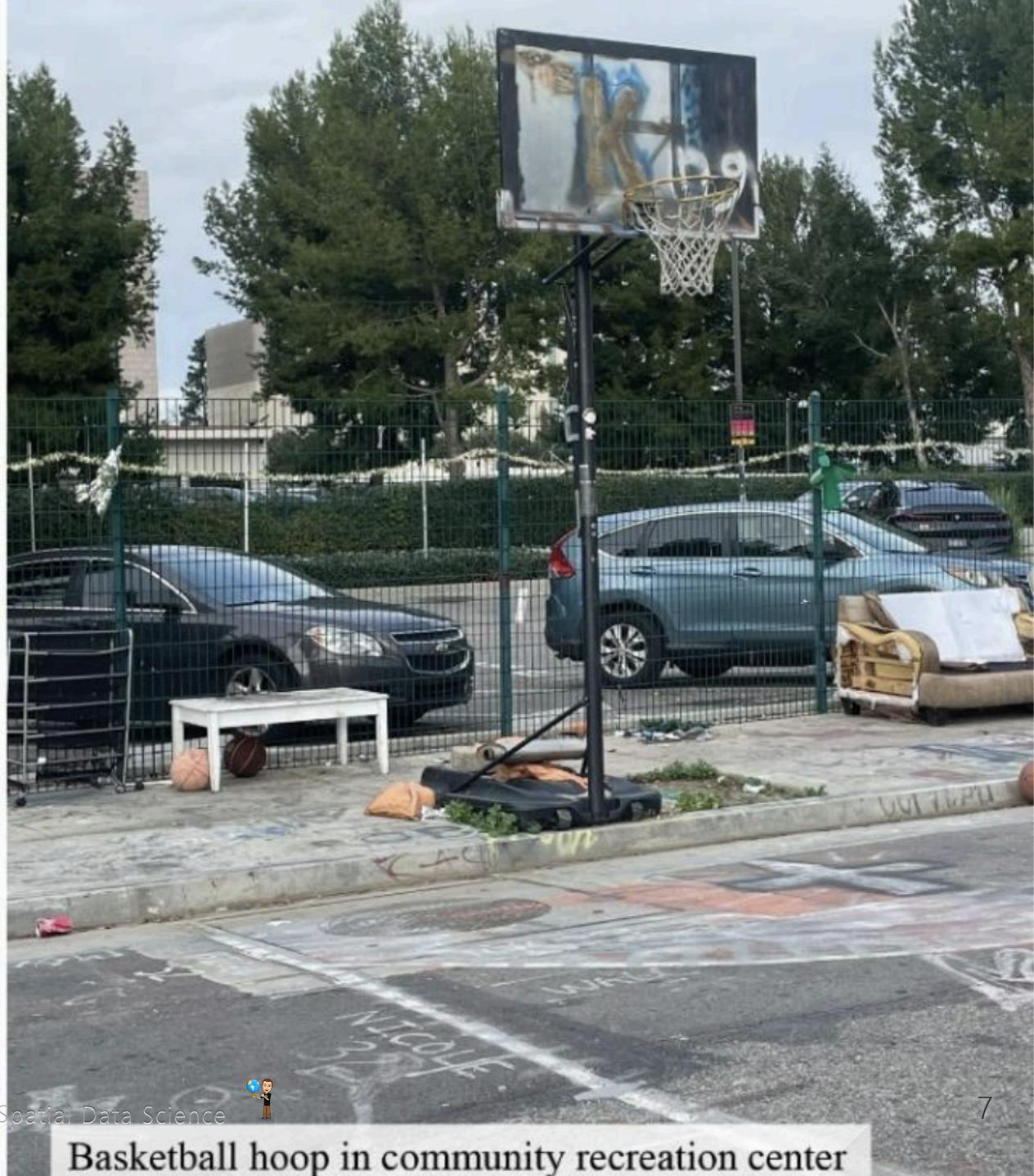
My doctoral dissertation in urban planning from UCLA

Planning just public space





Wood-fired community kitchen



Basketball hoop in community recreation center

Overview of the course



- Mark your attendance 
- Fill out the pre-class poll if you haven't already 
- Go over the Syllabus 
- Sign up for the course Slack channel. We will collaborate, code, and troubleshoot there.
- Check out this open source and big data document for links to geospatial data. Add sources; do not delete sources.



Meet your TA's

- Carl de Joya
- Nick Giorgio



Logistics

- Two monitors encouraged
 - Laptop + external monitor
 - Laptop + iPad
 - Laptop + cell phone
- Zoom setup: video **ON** by default PLEASE!
- Slack: **ALL** coding questions must be posted on slack
- [the ultimate T.A.'s guide to success](#)
- Waitlist student considerations
 - Next week we will create our groups! If you must drop the course, please do so before the next class.



Class spirit

Collaboration



Questions?



Lab session



Set your environment

First, grab the course material, and "pull" it into your JupyterHub space:

- [UP221 Git Puller](#) (This link will automatically launch JupyterHub and clone the course material into your directory; in future weeks we will use terminal to Git Pull any changes)



Today's lab will cover the following topics:

- Introducing GitHub
- Introducing JupyterHub
- Intro to Python



Individual Assignments

There are three deliverables this week. Each are due on Sunday by midnight. Week 1's assignments are due January 14th, 2024 by 11:59 PM. Each assignment must be posted in the [class discussion section](#).



#1. Create a GitHub account, and start a new repo

- Create a GitHub account, and create a project repo named “up221-yourfirstname” - [Instructions](#)
- Create a Readme.md file in your GitHub class repo, and introduce your Data Science project space (hint: use this [markdown guide](#))
- Submit your assignment [here](#)



#2. Submit two or more datasets

Search for two or more potential data sources that you may use for your research. If you are using a web resource, make sure that they are "downloadable." Upload your datasets to your repo. First, create a folder titled "data," and upload your datasets in there.



Acceptable formats:

- csv
- excel
- google sheet (provide link)
- geojson
- shapefile
- API source



Submit your dataset assignment [here](#), and make sure to provide the following information for each of your two datasets:

1. Name of the data
2. Description of the data and how you may use it for your project
3. A URL link to the source (if you got it from a website), or a description of where you got your data from
4. A URL link to the data on your repo



#3. Thinking cap



This week's "thinking cap" assignment is for you to find an article, blog, journal, chapter, or book that includes a spatial component (a map, chart, graphic) in regards to a topic related to urban justice. Make sure it is something that you would like to share with the class.



Then, write post with two parts:

- A paragraph that summarizes the article and reflects critically and creatively about the material in your own words. Why did this article speak to you in regards to your approach to data and research? How does it inform your learning goals for this course?
- How do you think the graphical outputs (maps/charts) were created for the article? Where did the data come from, and how do you think the outputs were created? Does it work? Why or why not?

The instructors will select a few of the readings for discussion in week
2.

Submit your assignment [here](#).

