Unlock the Power of Spatial Analysis

Technology Report

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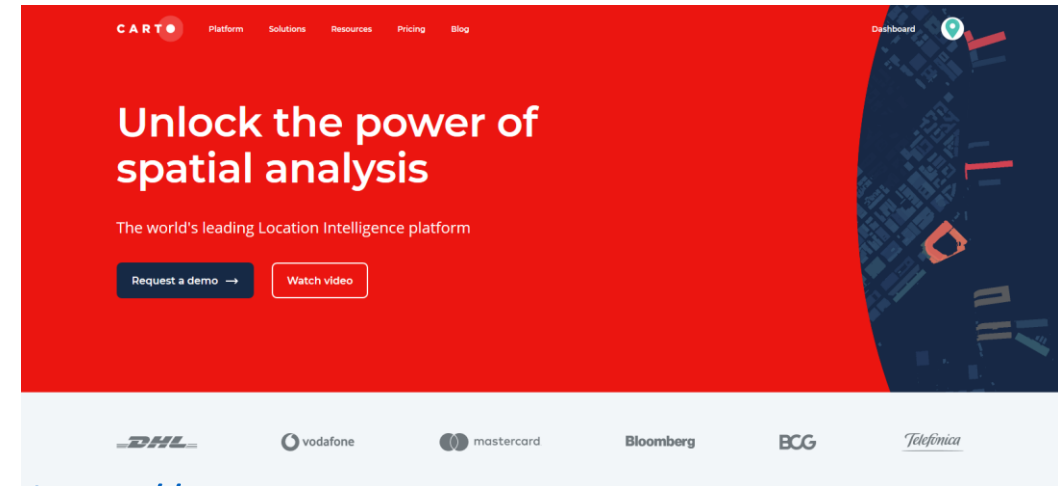
Bailey Hanson

CRP558

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What is CARTO?

A location Intelligence platform

Turns location data into:

- More efficient delivery routes
- Better behavioral marketing
- Strategic store placements
- Much more!

CARTO

https://www.carto.com

- What is CARTO
- Why and who is it for?
- What are the services advantages?
- Some solution created with CARTO
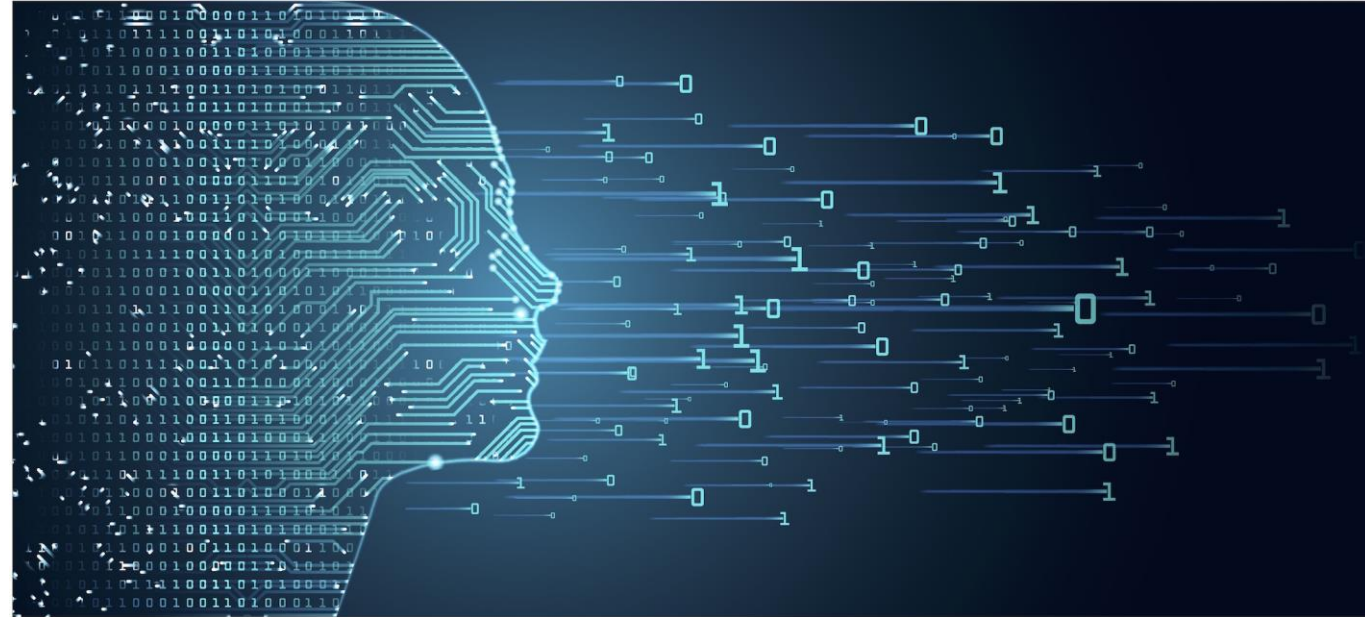- Own CARTO project: Kenya irrigated parcels

Why? Who?

For:

- Data scientists

- Developers

- Businesspeople

To:

- Understand where and why things happen

- Optimize business processes

- Predict future outcomes in

5 steps:

C A R T O

https://bit.ly/2JlnWeh

| Data Ingestion | Data Enrichment | Analysis | Solutions & Visualization | Integrations |

What are the services advantages of CARTO?

Data scientists	Developers	Examples of industries
Straight geocode & visualization	Libraries, data APIs, geocoding, routing and isolines	Financial Services Cities & Government Real Estate Retail Transport & Logistics Utilities Healthcare & Pharma Telecommunications Etc.
Time saving collecting	Prototype apps, upload data and start!	
Own libraries, functions, workflows	Performance and interactivity	
Publish and share results	Scale your apps to millions of requests	

Location, location, location!

https://bit.ly/2Uqve6V

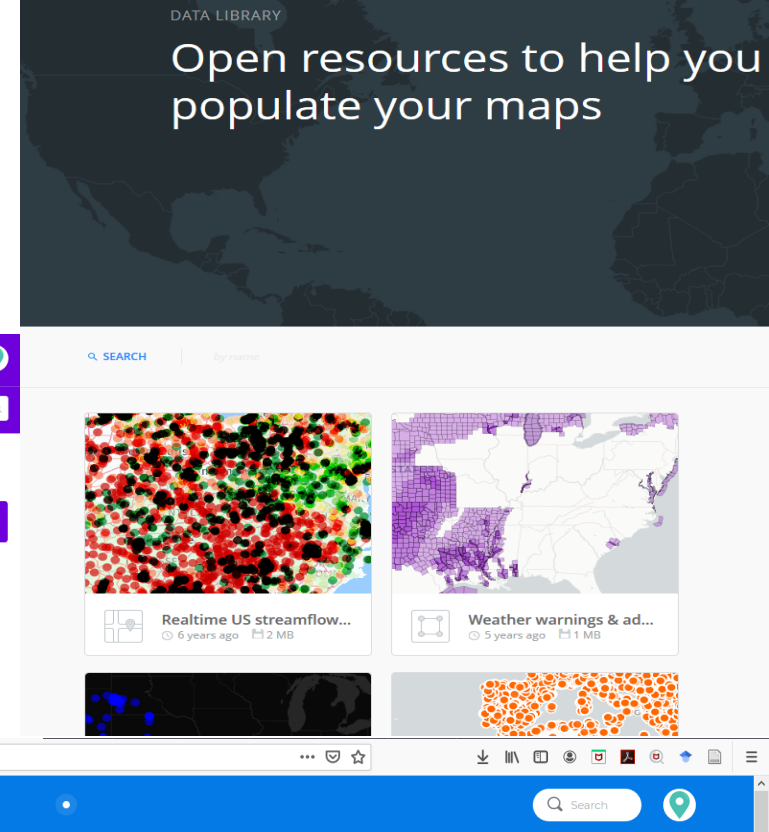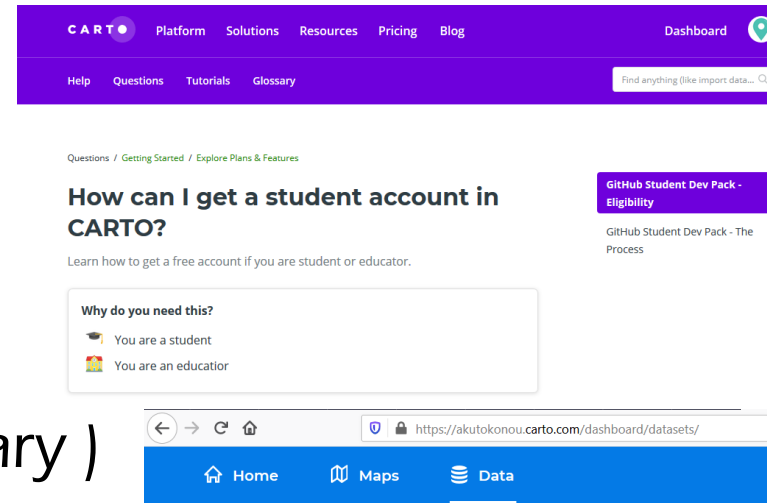CARTO

Some real-world projects with CARTO

© **BUPA group:** *catchment areas for their centers, customers center choice, geomarketing campaigns*

© **DHL:** *Territory Management for sales team*

© **Harris County TX:** *recovery and future disaster planning after Hurricane Harvey geomatrix.rilos.ru*

© **BBVA:** *visualize millions of location datasets on customer transactions and withdrawals*

© **Utilities:** Location Intelligence

© **Telefónica:** Urbo Smart Cities to monitor traffic, air quality and waste management in near real-time

© **Telco**: leverage Location Intelligence to find new revenues

© **Greenpeace**

© **Site Planning for Food Trucks in NYC:** where to locate to maximize revenues.

© **JLL:** *optimize office relocation planning and develop an intuitive customer dashboard*

© **El Corte Inglés:** *indoor mapping of their stores (geomatrix.rilos.ru)*

© **Bloomberg:** *power Bloomberg Maps inside terminals*

C A R T O

Own CARTO project: Kenya irrigated parcels
Steps 1 and 2

1. Created student account on Carto.com (it gives several advantages).

2. Got the datasets from the website (Carto has also a data library on carto.com/data-library)

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Steps 3 and 4

3. Cleaned the data (important to have at least a Cities, geocode address, or Longitude & Latitude columns).
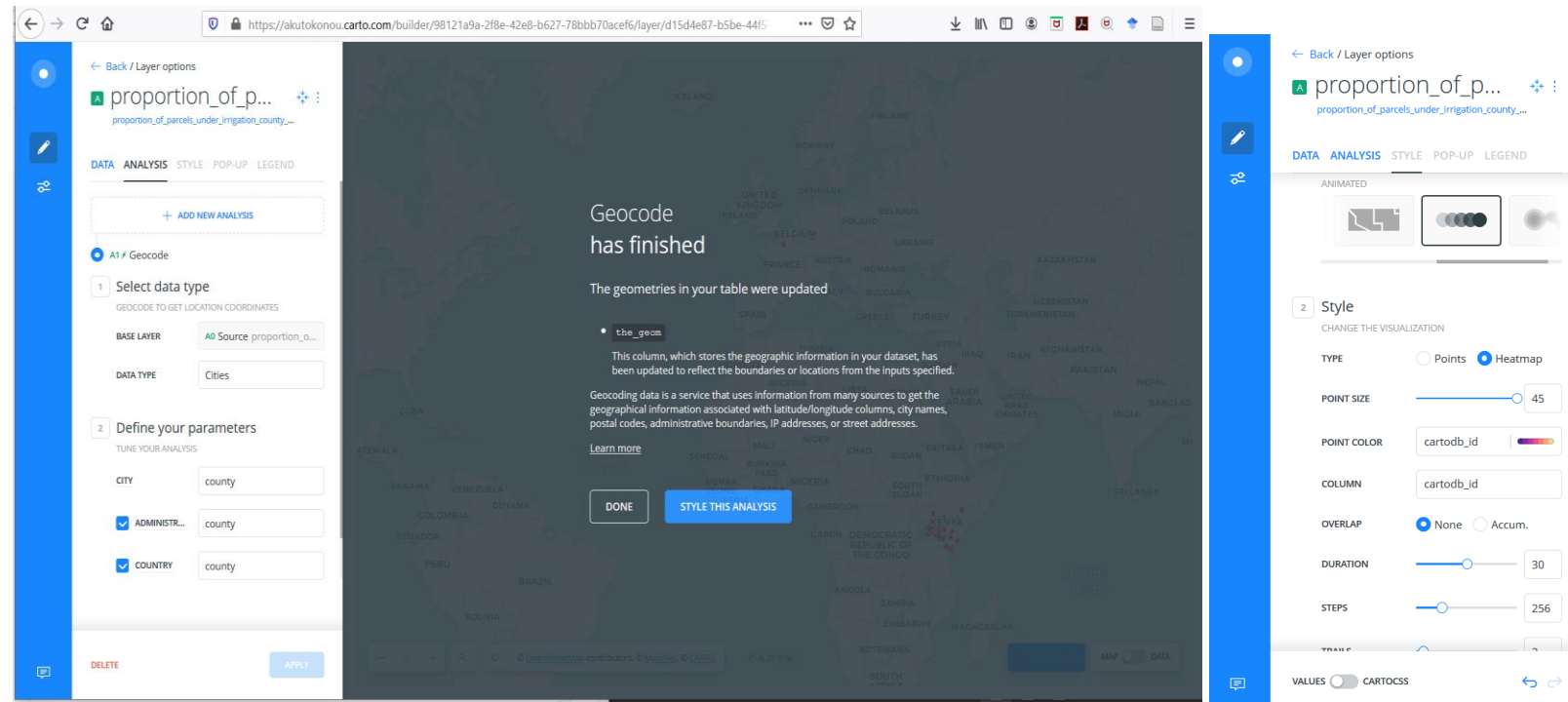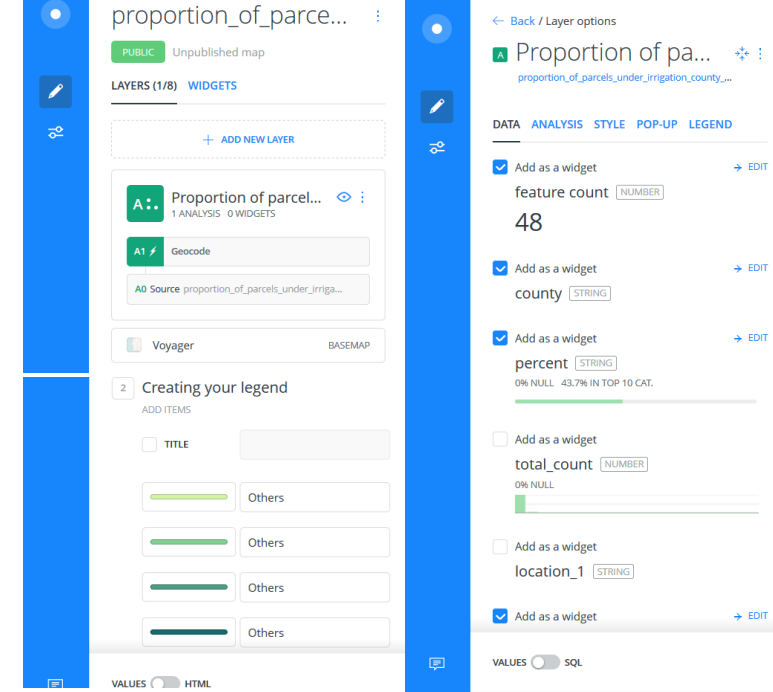
4. Went to Carto data visualization

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Steps 5 and 6

5. Populated the map with data uploading datasets

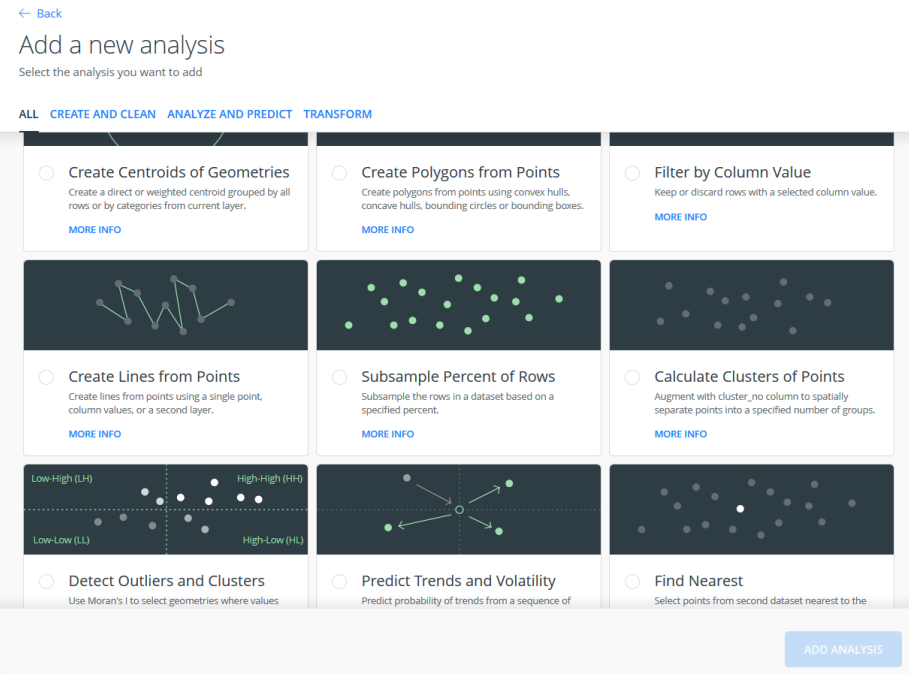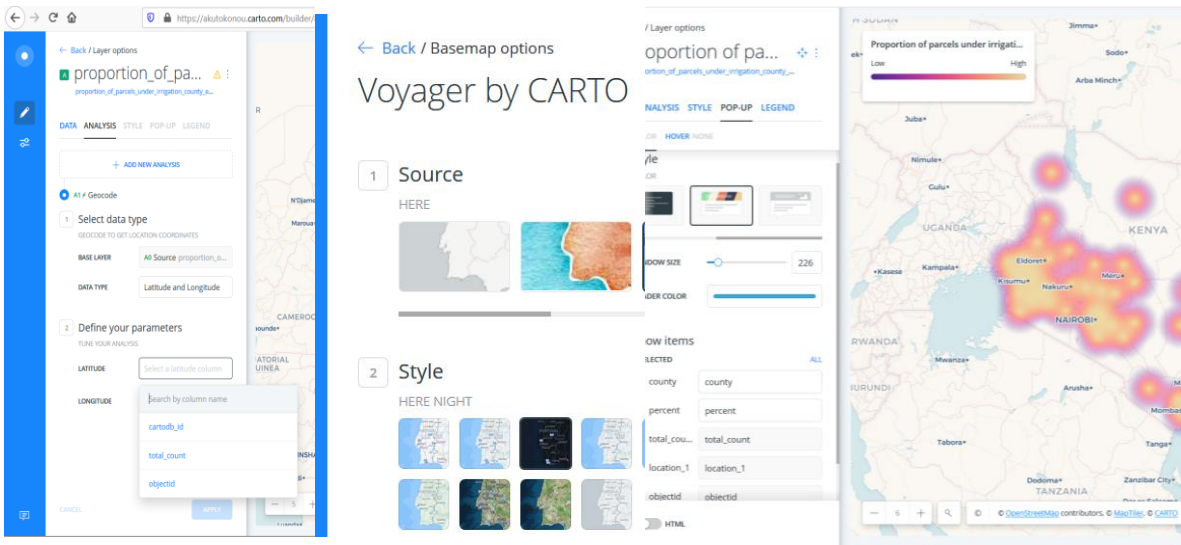6. The location seemed wrong, so Carto asked me to fix it using 48 credits of my free 400 (one by city).

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Steps 7 and 8

7. Edited the map: basemap, style (symbiology choosing a choropleth map, and an animated heat map). Data analysis is also possible.

8. Published with possibility of update the map later.

CARTO

Overall evaluation of the tool

- In general, Carto offers a very informative, simple website with a beautiful interface.

- At first glance, I had the impression that this is only reserved for corporates, but by searching I understood. better and I realized that it is easy to use.

- Possibility of student account is a great opportunity for us.

- What I wanted to be able to have in addition to the functionality of CARTO that we already have with other tools like ArcGIS online, is the possibility of creating a participatory data collection platform. I found a tool to do it, but it is a bit complicated and it took so long that I had to drop it along the way, otherwise it was the project I wanted to do at the start. Here is a link to access a tutorial, though, for those who would like to try: http://duspviz.mit.edu/web-map-workshop/cartodb-data-collection/

- Though, what I like as a nice plus is the animated symbology.

- Easy to embed in a code, with the html code provided after publishing.

- Link to my maps: https://akutokonou.github.io/CRP558/techreport/