

Data Visualization y Storytelling

Alejandro Vidal - [@doblepensador](#)



Trends in Data Visualization Software ...
towardsdatascience.com



9 Data Visualization Tools That You ...
towardsdatascience.com



Comparing Data Visualization Software ...
bernardmarr.com



15 Most Popular Data Visualization Tools



Data Visualization Software Programs ...



Open Source Data Visualization Software



Fig 1: Yo cuando veo esto

**Si de mayor quiero ser
visualizador**

**¿Qué tengo que
aprender?**

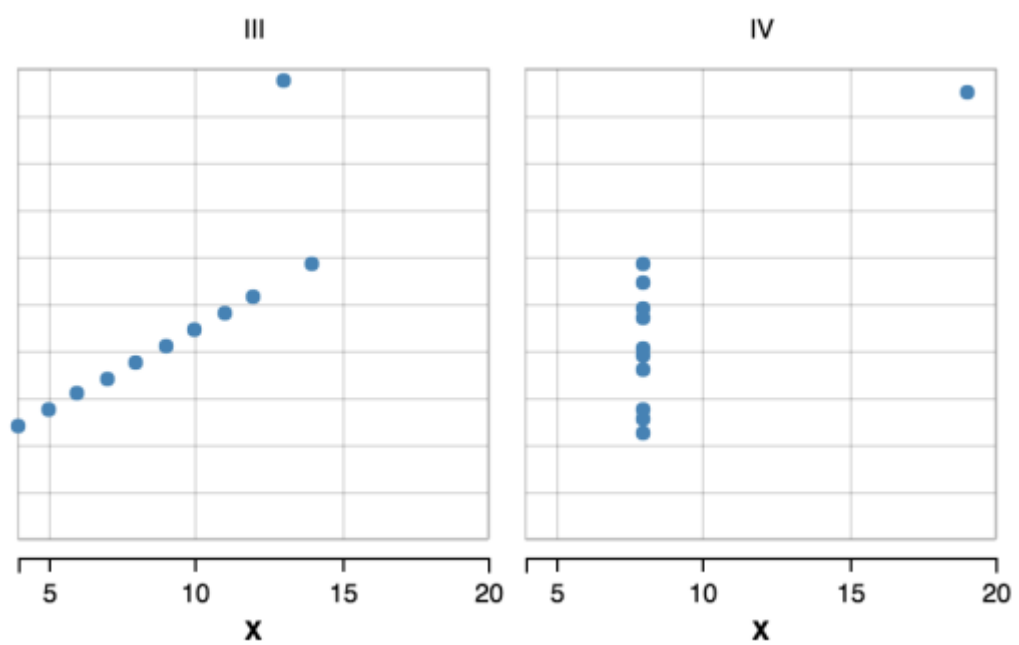
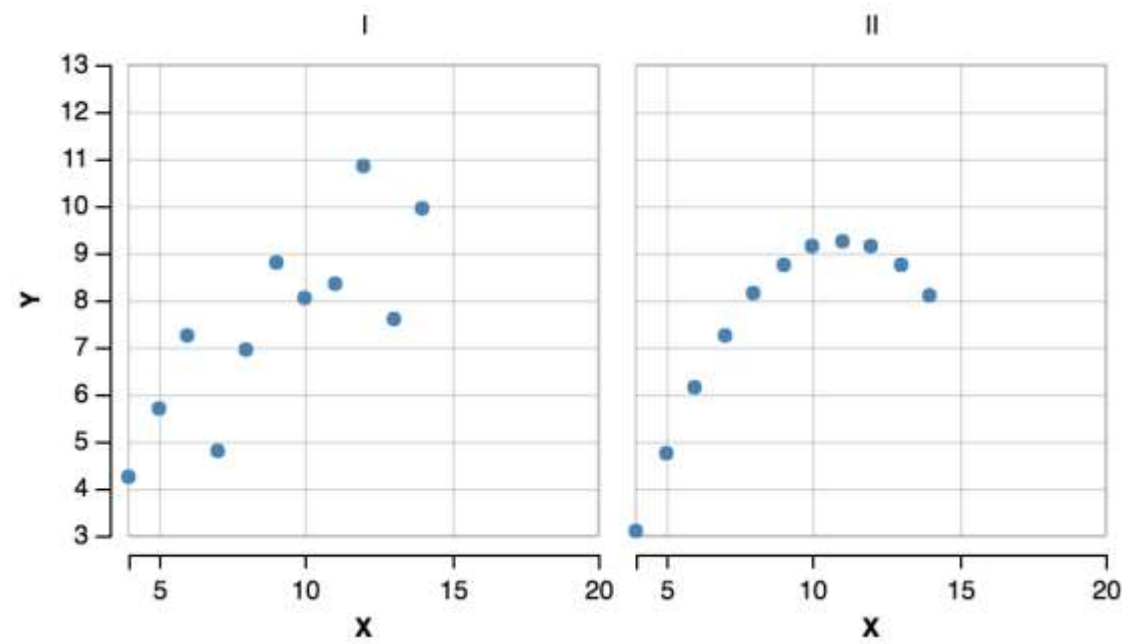
Lo primero: ¿Por qué?

	<table><tr><th>x</th><th>y</th></tr><tr><td>10.0</td><td>8.04</td></tr><tr><td>8.0</td><td>6.95</td></tr><tr><td>13.0</td><td>7.58</td></tr><tr><td>9.0</td><td>8.81</td></tr><tr><td>11.0</td><td>8.33</td></tr><tr><td>14.0</td><td>9.96</td></tr><tr><td>6.0</td><td>7.24</td></tr><tr><td>4.0</td><td>4.26</td></tr><tr><td>12.0</td><td>10.84</td></tr><tr><td>7.0</td><td>4.82</td></tr><tr><td>5.0</td><td>5.68</td></tr></table>	x	y	10.0	8.04	8.0	6.95	13.0	7.58	9.0	8.81	11.0	8.33	14.0	9.96	6.0	7.24	4.0	4.26	12.0	10.84	7.0	4.82	5.0	5.68
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Varianza	11 4.12																								
Corr. Pearson	0.82																								
Regresión	$y = 3 + 0.5x$																								

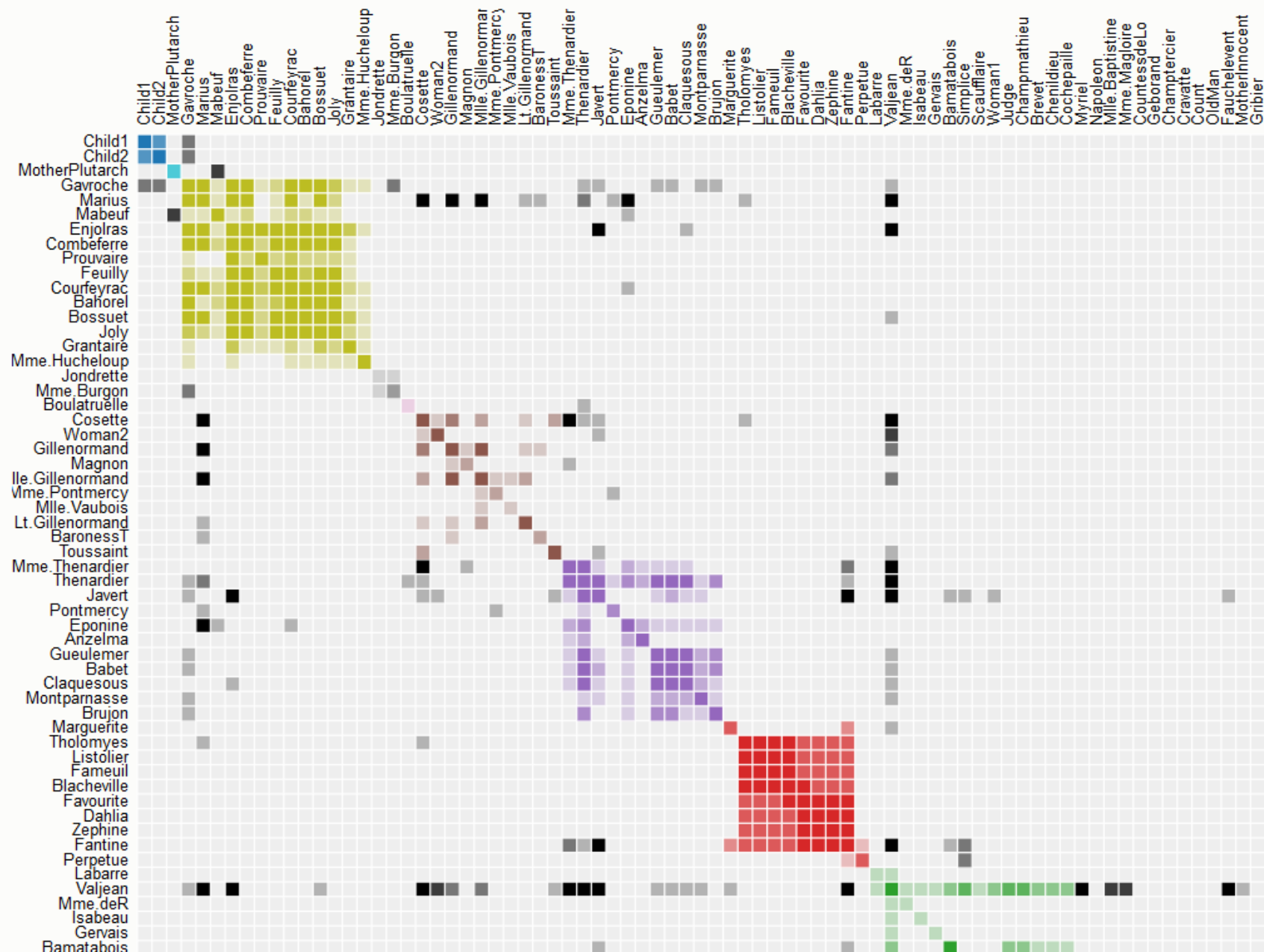
	<table><tr><th>x</th><th>y</th></tr><tr><td>10.0</td><td>9.14</td></tr><tr><td>8.0</td><td>8.14</td></tr><tr><td>13.0</td><td>8.74</td></tr><tr><td>9.0</td><td>8.77</td></tr><tr><td>11.0</td><td>9.26</td></tr><tr><td>14.0</td><td>8.10</td></tr><tr><td>6.0</td><td>6.13</td></tr><tr><td>4.0</td><td>3.10</td></tr><tr><td>12.0</td><td>9.13</td></tr><tr><td>7.0</td><td>7.26</td></tr><tr><td>5.0</td><td>4.74</td></tr></table>	x	y	10.0	9.14	8.0	8.14	13.0	8.74	9.0	8.77	11.0	9.26	14.0	8.10	6.0	6.13	4.0	3.10	12.0	9.13	7.0	7.26	5.0	4.74
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	11 4.12																								
	0.82																								
	$y = 3 + 0.5x$																								

	<table><tr><th>x</th><th>y</th></tr><tr><td>10.0</td><td>7.46</td></tr><tr><td>8.0</td><td>6.77</td></tr><tr><td>13.0</td><td>12.74</td></tr><tr><td>9.0</td><td>7.11</td></tr><tr><td>11.0</td><td>7.81</td></tr><tr><td>14.0</td><td>8.84</td></tr><tr><td>6.0</td><td>6.08</td></tr><tr><td>4.0</td><td>5.39</td></tr><tr><td>12.0</td><td>8.15</td></tr><tr><td>7.0</td><td>6.42</td></tr><tr><td>5.0</td><td>5.73</td></tr></table>	x	y	10.0	7.46	8.0	6.77	13.0	12.74	9.0	7.11	11.0	7.81	14.0	8.84	6.0	6.08	4.0	5.39	12.0	8.15	7.0	6.42	5.0	5.73
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	<table><tr><th>x</th><th>y</th></tr><tr><td>8.0</td><td>6.58</td></tr><tr><td>8.0</td><td>5.76</td></tr><tr><td>8.0</td><td>7.71</td></tr><tr><td>8.0</td><td>8.84</td></tr><tr><td>8.0</td><td>8.47</td></tr><tr><td>8.0</td><td>7.04</td></tr><tr><td>8.0</td><td>5.25</td></tr><tr><td>19.0</td><td>12.50</td></tr><tr><td>8.0</td><td>5.56</td></tr><tr><td>8.0</td><td>7.91</td></tr><tr><td>8.0</td><td>6.89</td></tr></table>	x	y	8.0	6.58	8.0	5.76	8.0	7.71	8.0	8.84	8.0	8.47	8.0	7.04	8.0	5.25	19.0	12.50	8.0	5.56	8.0	7.91	8.0	6.89
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	$y = 3 + 0.5x$																								



Les Misérables Co-occurrence



Order:

This matrix diagram visualizes character co-occurrences in Victor Hugo's *Les Misérables*.

Each colored cell represents two characters that appeared in the same chapter; darker cells indicate characters that co-occurred more frequently.

Use the drop-down menu to reorder the matrix and explore the data.

Built with [d3.js](#).

Mundo de visualización:

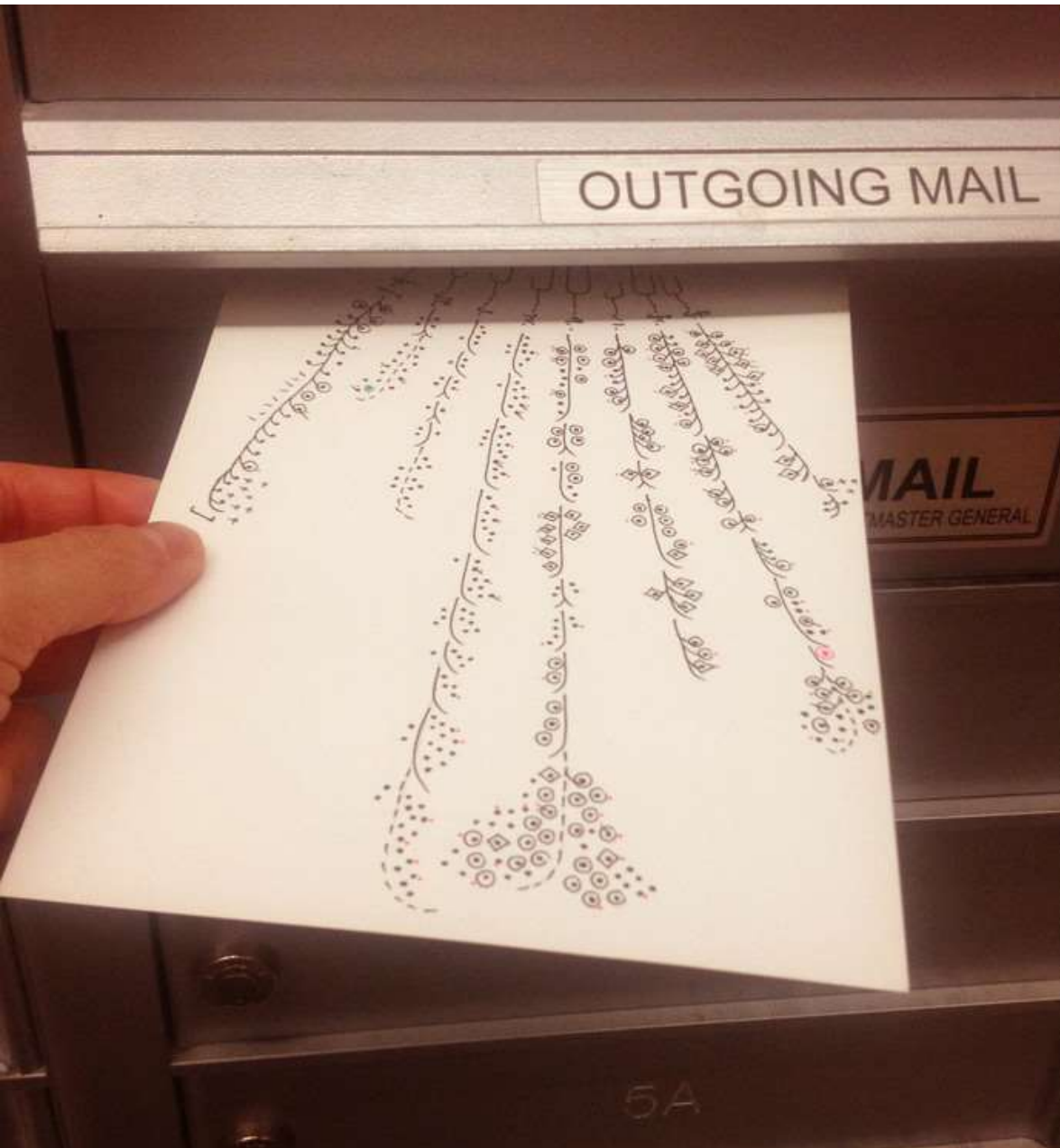
Ejes, tribus e islas



Eje artístico - funcional



dear-data.com



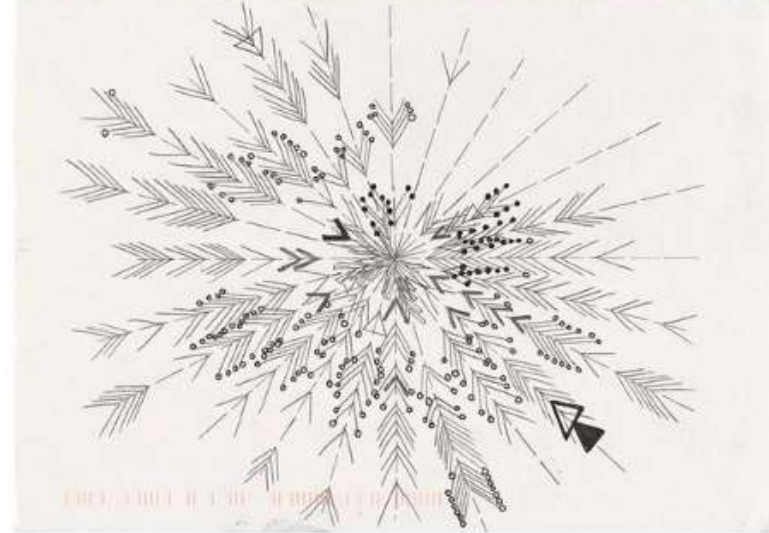
GEORGIA

week one



a week of clocks

Stefanie



DEAR DATA
WEEK 01: WHAT'S THE TIME?

HOW TO READ IT:



each symbol represents every moment
I glanced at the clock grouped
by hours of the day.
Different symbols and attributes
represent why and how I
checked the time.

SYMBOLS

- o ~~an~~ purpose: won't do to know
what the time was.
- just glances: on a phone, mac
or elsa.
- because I thought of this project.
- x I thought (I don't look) on
but I did.
- 1 because I was bored
- 11 because I was hungry

A Heard somebody saying
the time aloud.

0012280001

ATTRIBUTES

- f*ck! I'm late!
- oh, ok. I'm fine.
- analog support
(i.e. wrist watch)
- alarm clock ring.
- glanced at the clock
while texting or
emailing with
Stefanie. ☺

SEND TO:

STEFANIE POSAVEC
LONDON
[UK]
ENGLAND

SECOND ATTEMPT
NEW YORK NY 100
07 OCT 2014



Drawing her first postcard, Georgia had an idea for her whole collection: from now on every time
she tracks something related to Stefanie, or to Dear Data, she uses a special pen to represent it!

• pink ink pen!

DEAR DATA: WEEK 01:
A WEEK OF CLOCKS

LEGEND

- Each LINE = ONE
HOUR OF THE DAY,
MOVING CLOCKWISE
- Each LINE = ONE DAY, MOVING
CLOCKWISE
- Each LINE = ONE DAY, MOVING
CLOCKWISE
- Each LINE = ONE DAY, MOVING
CLOCKWISE

AN INSTANCE OF
CLOCK-WATCHING IS INDICATED BY A

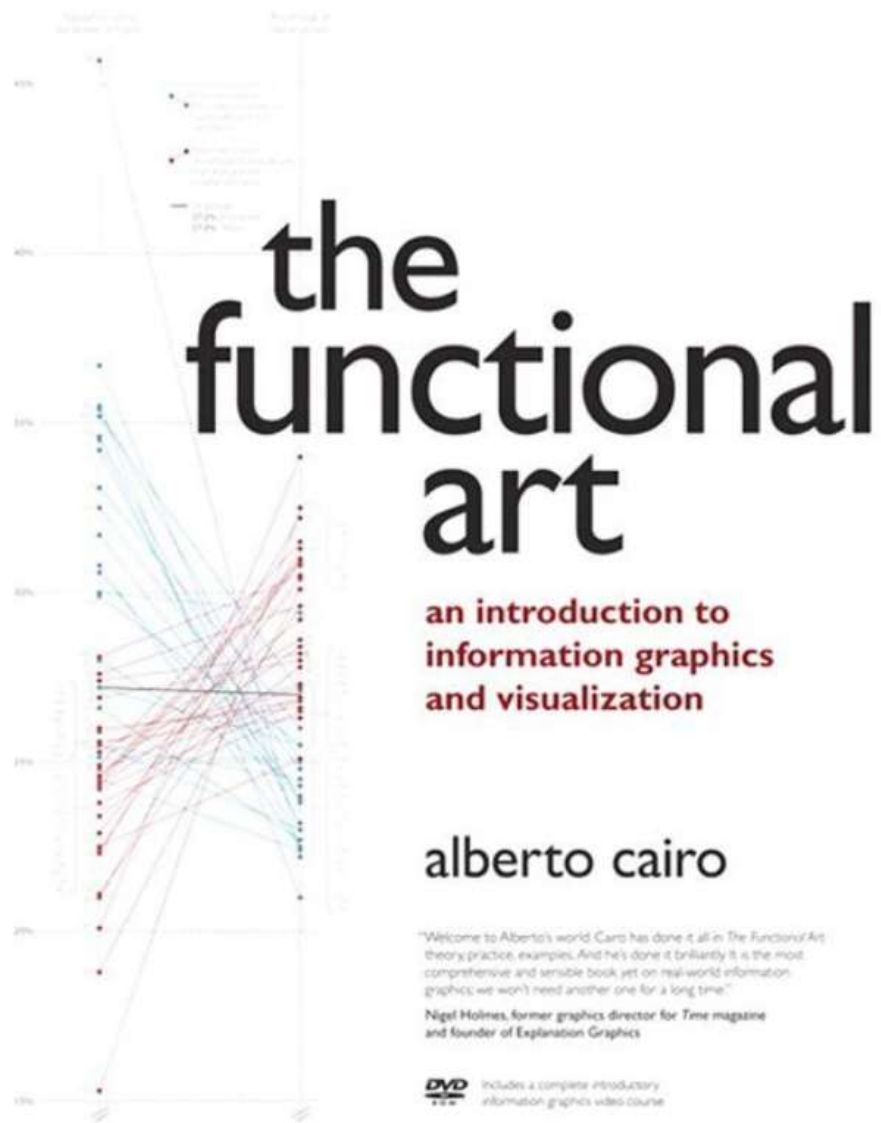
Symbol	Symbol	Symbol	Symbol
PHONE	151	CAR	151
LAPTOP	84	MICROWAVE	151
TABLET	10	FRIEND'S OVEN	151
HUSBAND'S PHONE	3	CHURCH CLOCK	151
WATCH	11		

From
S. POSAVEC
LONDON
07 OCT 2014

GEORGIA LUPI
BROOKLYN, NY
USA

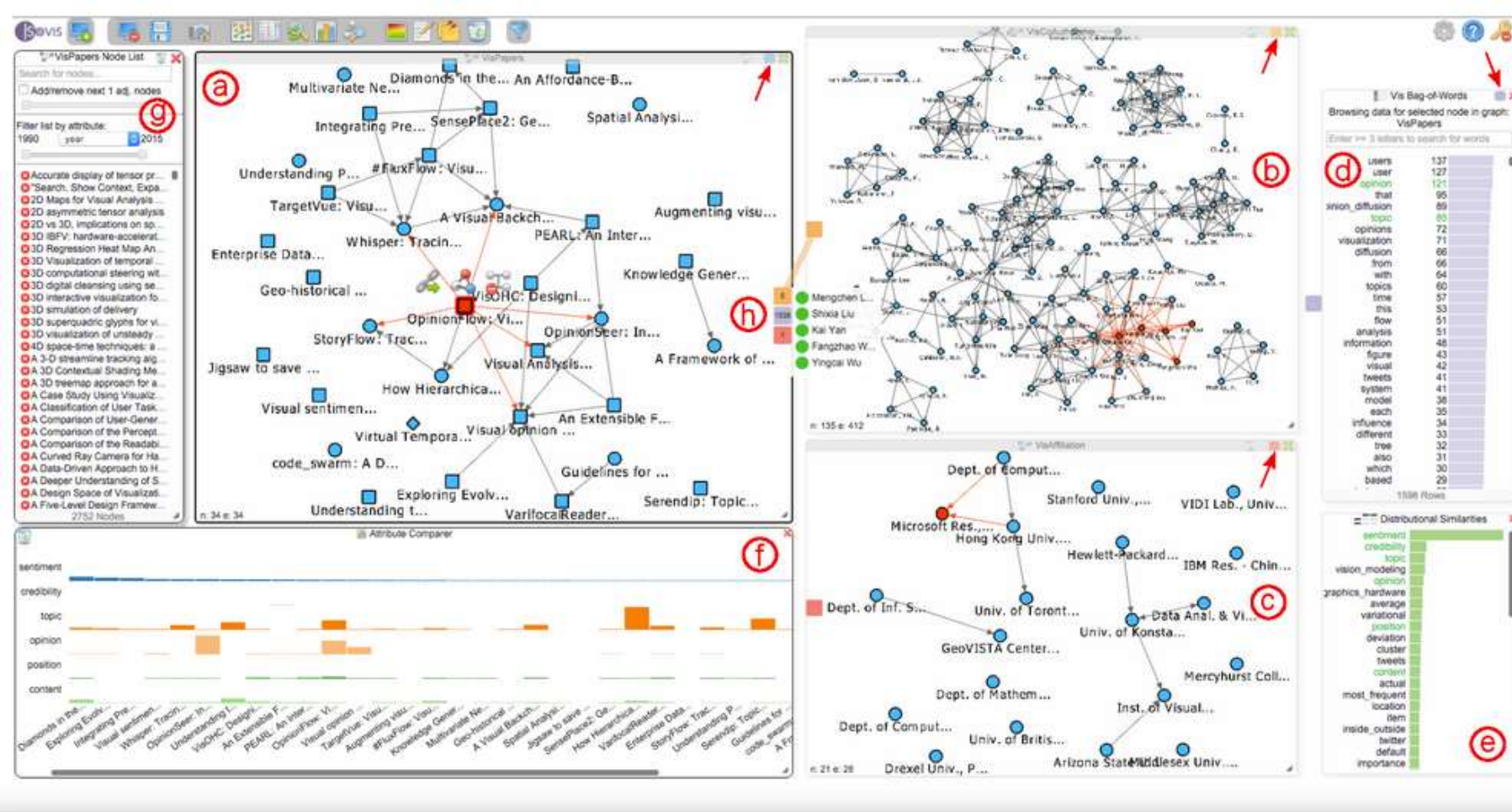
BY AIR MAIL
par avion
Royal Mail

This week Georgia and Stefanie tried gathering data in small notebooks (ridiculous), but soon switched to making notes
on their phones (much easier). Stefanie's favourite clock to capture: a bell tolling the time in a town in Devon.



“El arte funcional”

Libro muy recomendado



No es feo contra bonito sino que objetivo se persigue

Figure 4. An analysis session in progress. Here, a mapping between a paper citation network (a), a co-authorship network (b) and an affiliation network (c) is explored. The bag-of-words chart (d) shows all terms for the... [Continue Reading](#)

Published in Informatics 2017

Visual Analysis of Relationships between Heterogeneous Networks and Texts: An Application on the IEEE VIS Publication Dataset

Björn Zimmer, Magnus Sahlgren, Andreas Kerren



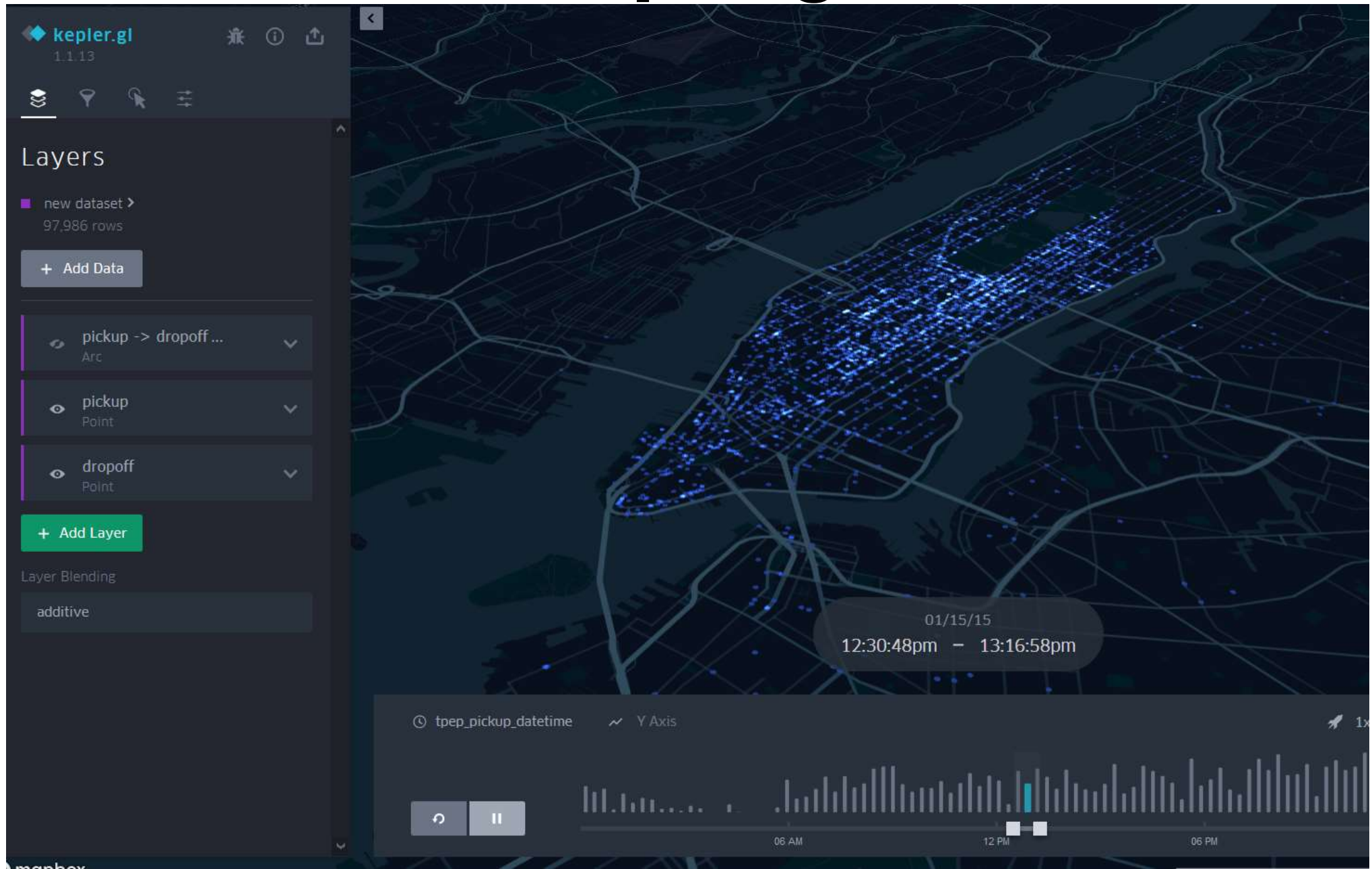
First Period: Algebra 1			As of May 1, 2012 (80% complete)										Help						
Student			Overall Course Grade			Assignments					Assessments		Attendance				Behavior		
						YTD	Spread	50%	Last	100%	Late	Last 5	Last	February March April May				Ref	Det
	Bae Kim	E	F		X	59					3		39					3	2
	Fiona Reeves	S	D	X		65					3		47					1	1
	Brian Francis		D		X	65					2		67						
	Frederick Chandler		F		X	66					2		41					2	1
	Anthony Harper	S	D			69					1		62						
	Christopher Murphy		D	X		70					1		55						
	Kirsten Holmes		C			72							67					1	
	Nikolas Mikhailovich	E	C	X		72							63						
	Roshawn Dawson		C			72							78					1	1
	James Martin		C			74					1		71						
	Blaine Harper		C	X		75							71					1	1
	George Smith		C			78					1		76					1	1
	Regan Potrero		C			79					1		67						
	Britta Jones		B			81							85						
	Scott Ortiz		B			82					1		82						
	Xu Mei		B			83							83						
	Jaime Goss		B			84							82					1	1
	Samuel Miller		B			84							81						
	Maria Garcia		B			86							72					2	1
	Jose Domingo		B			86							84						
	Lawrence Parker		B			87							80					1	1
	Fariah Jackson		B			88							84						
	Sarah Jameson		B			88					1		78					1	1
	David Chenowith		B			88							80					1	
	Alison Perry		B			89							85						

“Student Dashboard” de Stephen Few

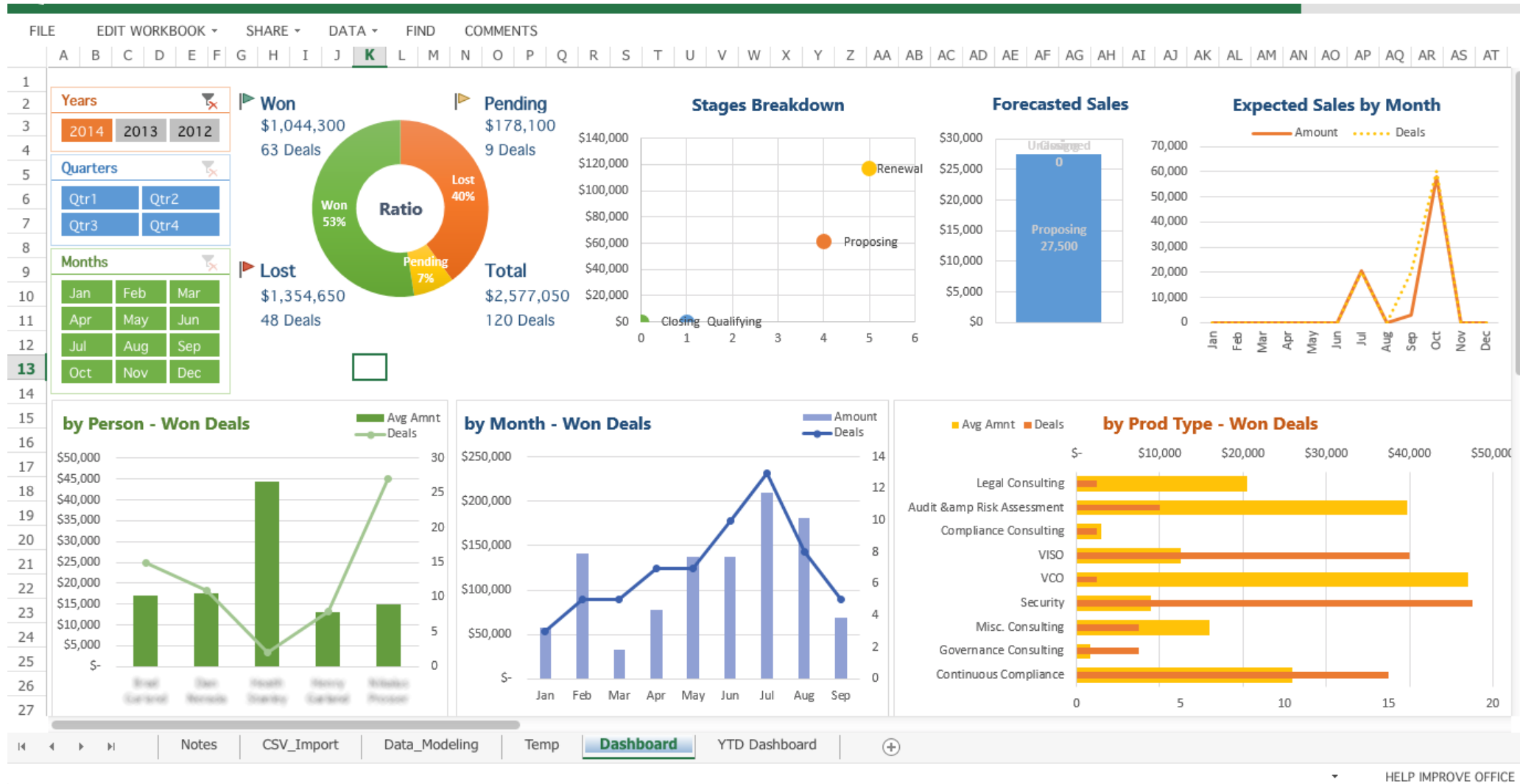
Eje estático - interactivo



kepler.gl



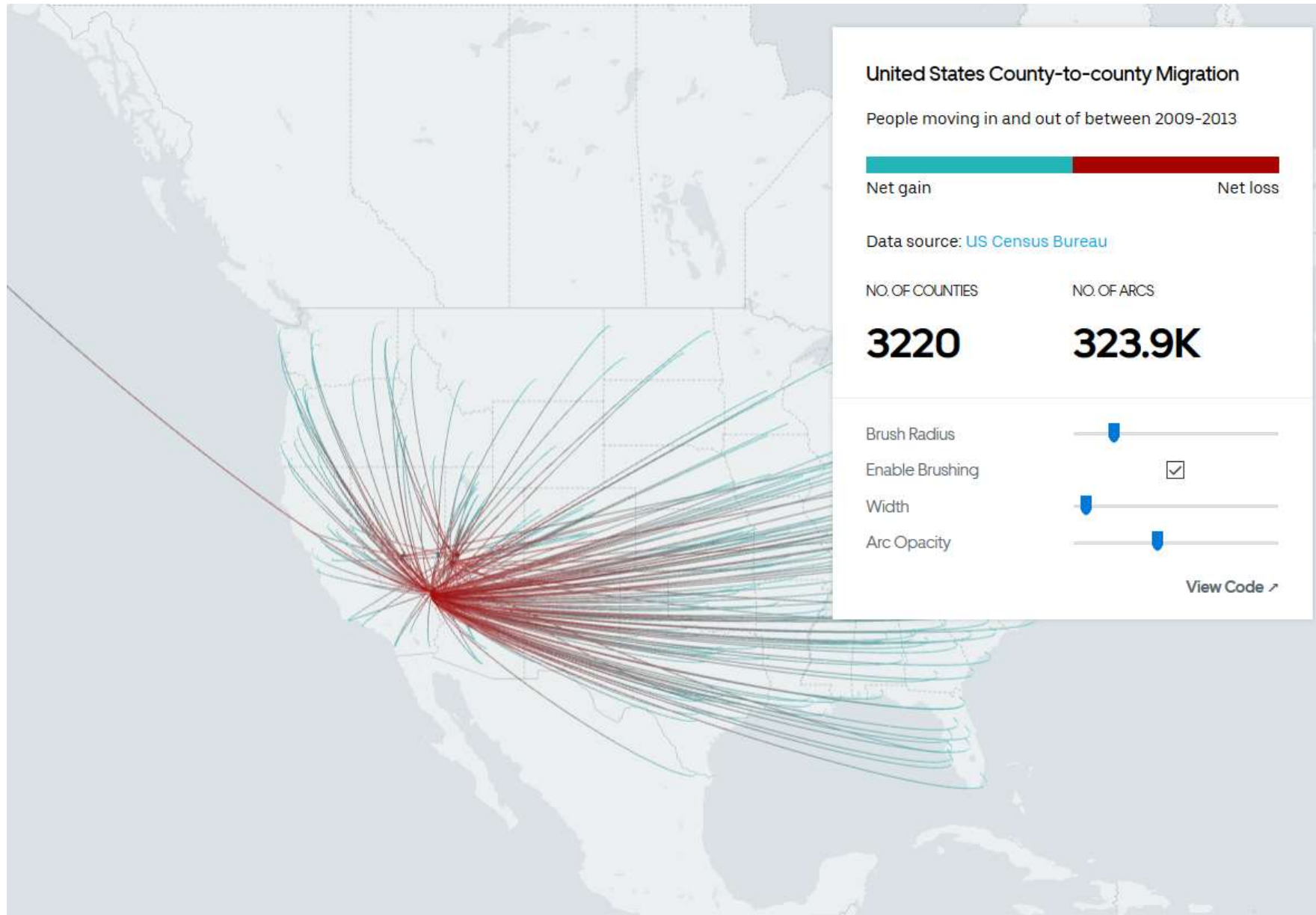
dashboard en Excel #1092381



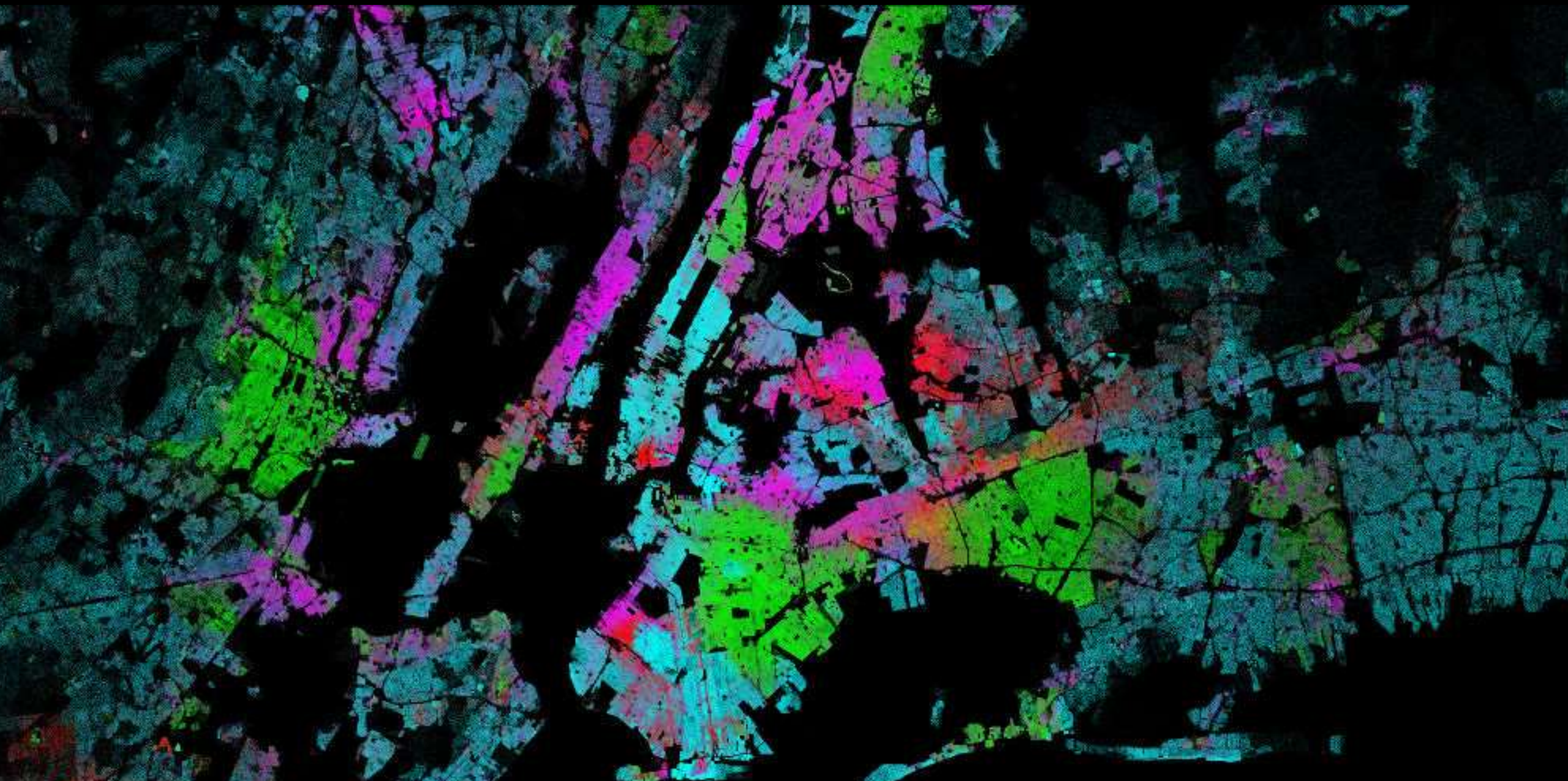
Isla del alto rendimiento



deck.gl



datashader



Tribu analítica / científico de datos



(falsa) Guerra Python vs R





Navigation

[Home](#)[Overviews](#)[High-level tools](#)[All tools](#)[Dashboarding](#)[SciVis](#)[Tutorials](#)[Topics](#)[Github](#)

Quick search

All Tools

This page lists libraries for visualizing data in Python. If you see any missing Python tools, please open a [PR](#) for [tools.yml](#). Tools are sorted in each category according to their total downloads per month when added to the list. Note that conda downloads are computed by summing total downloads across the defaults channel, conda-forge, and bioconda; data for other channels is not currently included.

Core

Python libraries on which multiple higher-level libraries are built.

Name	Stars	Contributors	Downloads	License	Docs	PyPI	Conda	Sponsors
matplotlib	Stars 11k	Contributors 423	pypi 8.7M/month conda 540k/month	PSF	website up	v3.1.3	anaconda v3.1.3	
plotly.py	Stars 8k	Contributors 104	pypi 2.3M/month conda 120k/month	MIT	website up	v4.5.0	anaconda v4.4.1	
bokeh	Stars 13k	Contributors 392	pypi 96.3k/month conda 84k/month	BSD-3-Clause	website up	v1.4.0	anaconda v1.4.0	

High-Level Shared API

Libraries sharing the Pandas .plot() API, built upon the core Python or JS libraries.

Name	Stars	Contributors	Downloads	License	Docs	PyPI	Conda	Sponsors
pandas	Stars 23k	Contributors 414	pypi 18M/month conda 520k/month	BSD	website up	v1.0.1	anaconda v1.0.1	
xarray	Stars 1.5k	Contributors 200	pypi 169k/month conda 220k/month	Apache	website up	v0.15.0	anaconda v0.15.0	
cufflinks	Stars 1.5k	Contributors 26	pypi 14.0k/month	MIT	website up	v0.17.0	-	-
hvplot	Stars 240	Contributors 16	pypi 9.6k/month conda 10k/month	BSD	website up	v0.5.2	anaconda v0.5.2	
Pandas-Bokeh	Stars 331	Contributors 6	pypi 4.7k/month	MIT	website up	v0.4.2	-	-

[CHART TYPES](#)[QUICK](#)[TOOLS](#)[ALL](#)[D3.JS](#)[PYTHON](#)[DATA TO VIZ](#)[ABOUT](#)

Distribution



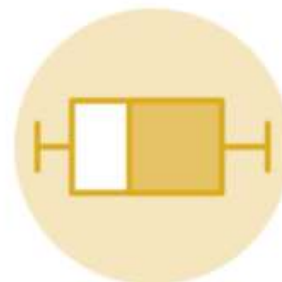
Violin



Density



Histogram



Boxplot



Ridgeline

Correlation



Scatter



Heatmap



Correlogram



Bubble



Connected scatter



Density 2d

Ranking

Tribu narrativa

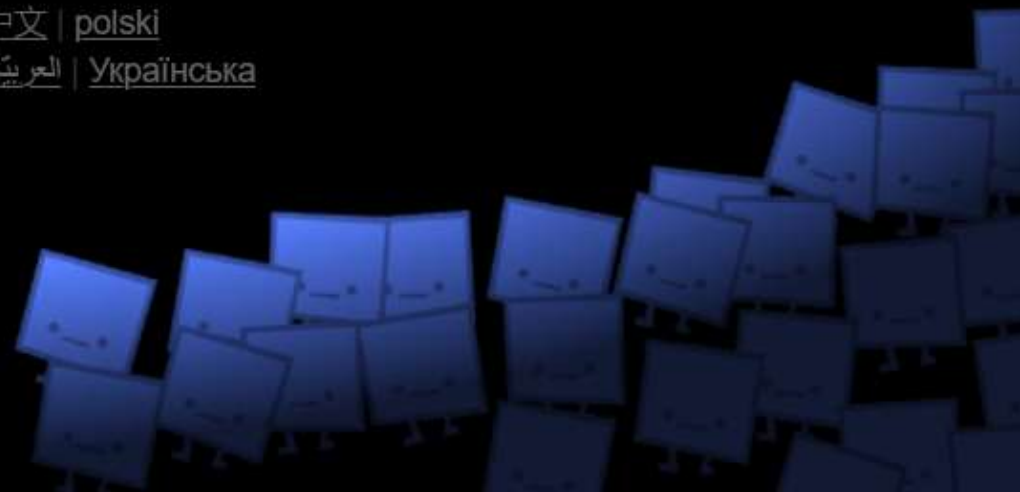
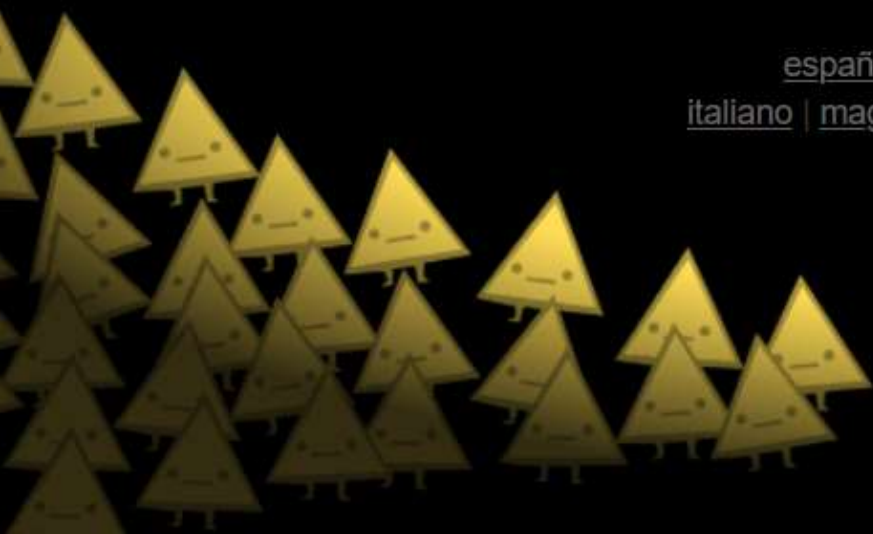


PARABLE OF THE POLYGONS

A PLAYABLE POST ON THE SHAPE OF SOCIETY

by vi hart + nicky case

español | deutsch | français | português | 日本語 | 中文 | polski
italiano | magyar | nederlands | हिन्दी | čeština | Русский | العربية | Українська



Una introducción visual al machine learning



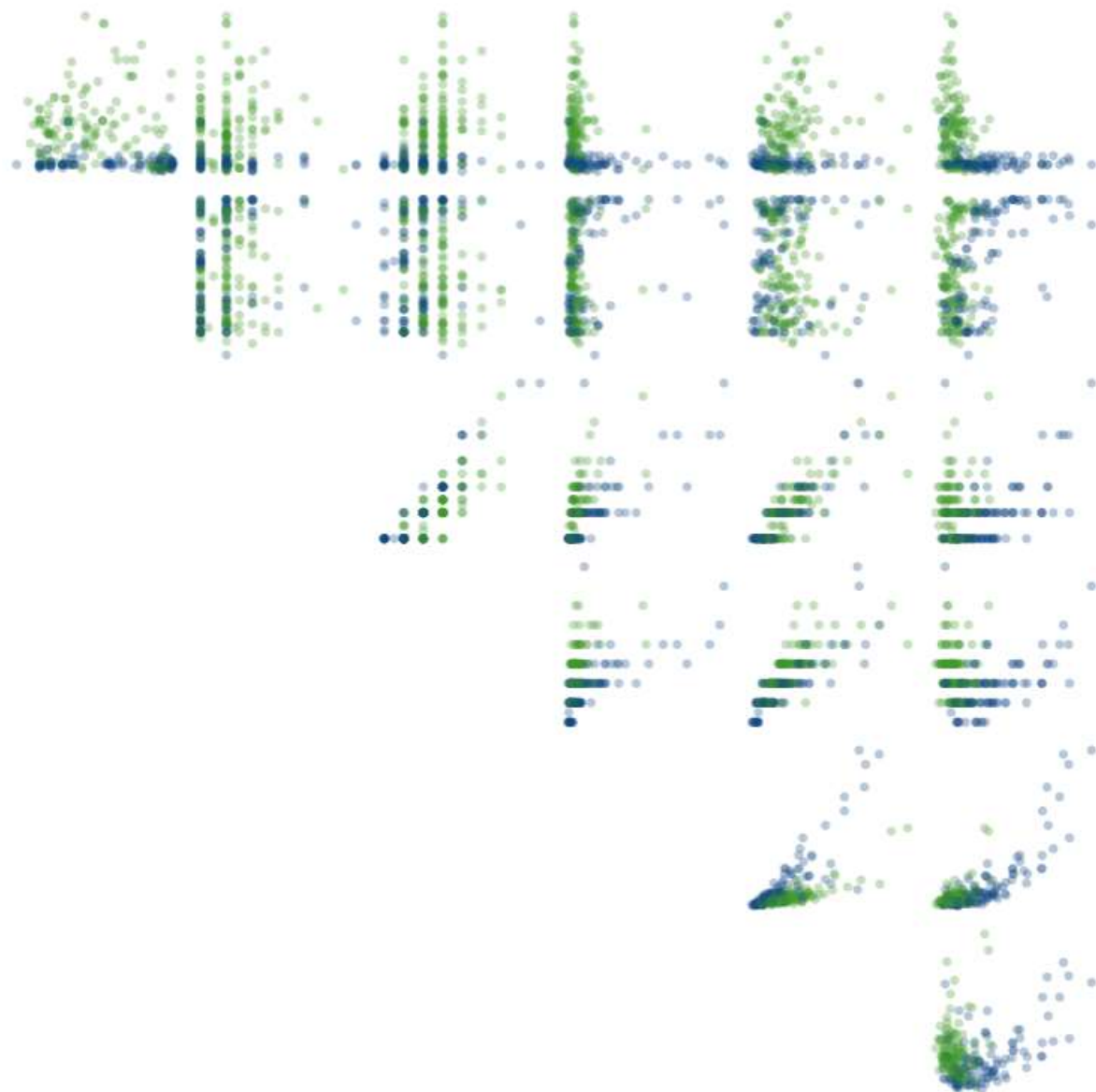
Español



En Machine learning (o aprendizaje de máquina), los computadores aplican técnicas de **aprendizaje** estadístico para identificar patrones en los datos de manera automática. Estas técnicas pueden ser utilizadas para hacer predicciones con una alta precisión.

Continúa desplazándote por el documento.

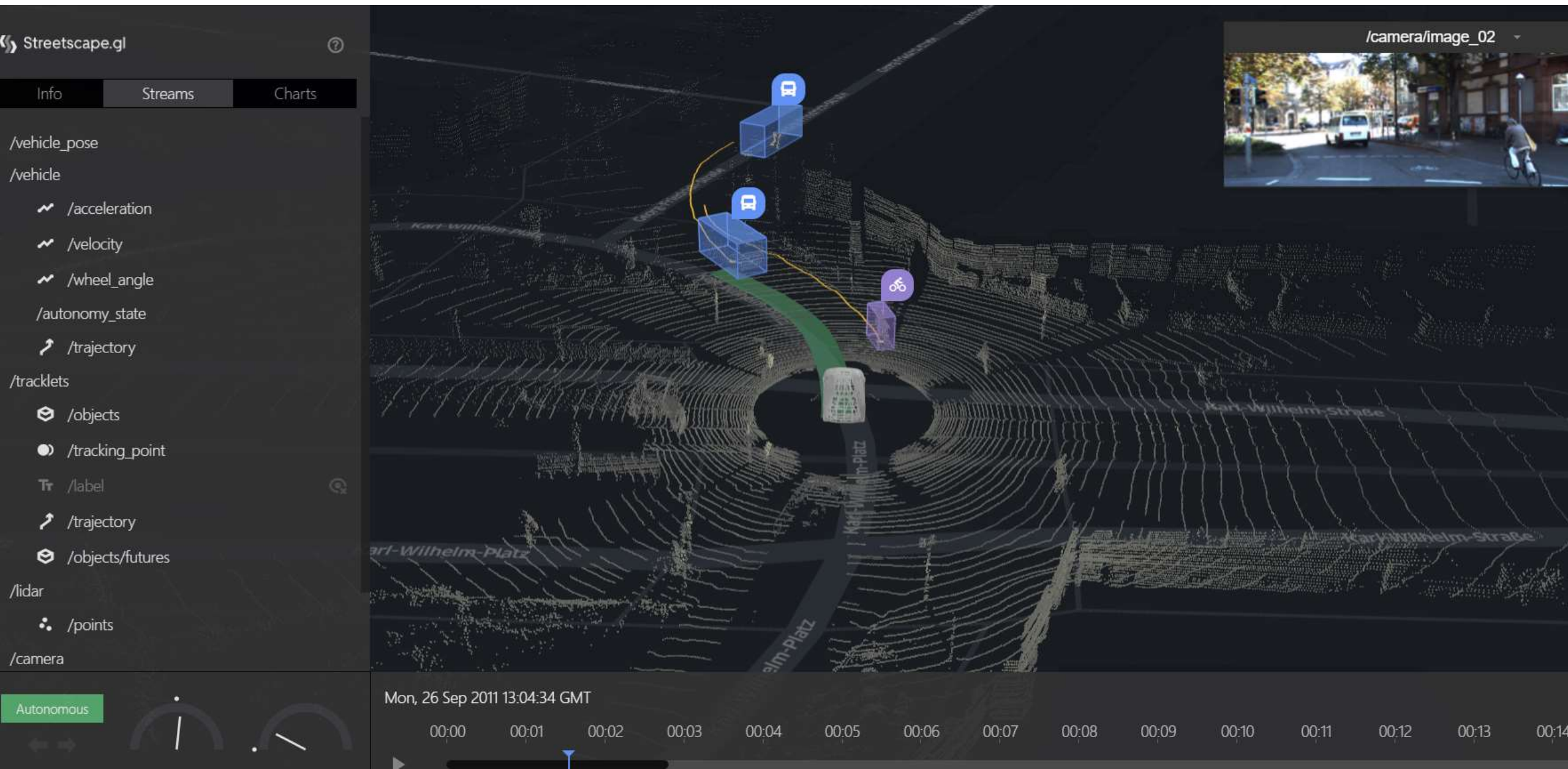
Utilizaremos un conjunto de datos de viviendas



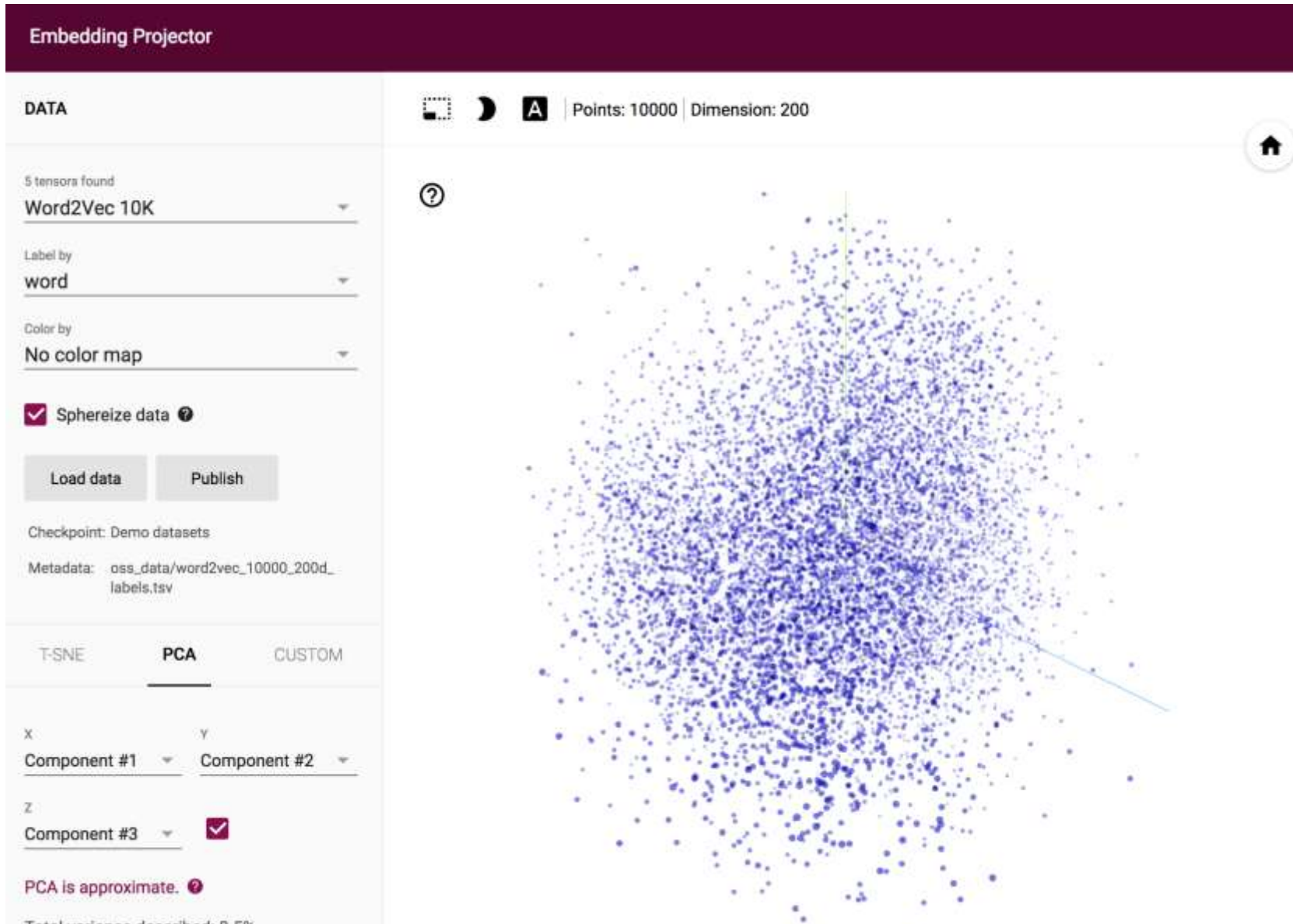
Isla de visualización de modelos <3



avs.auto



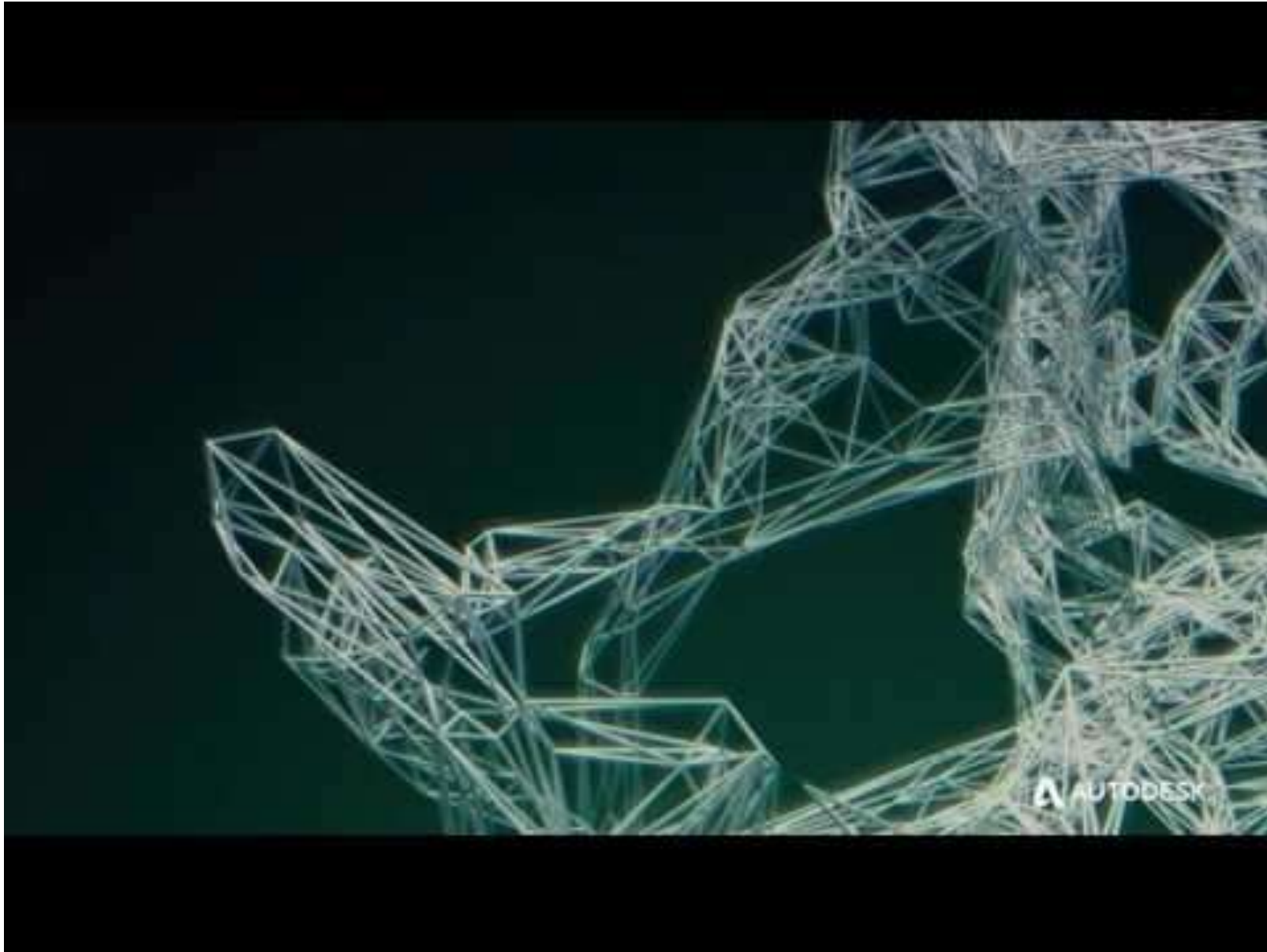
Tensorflow Projector



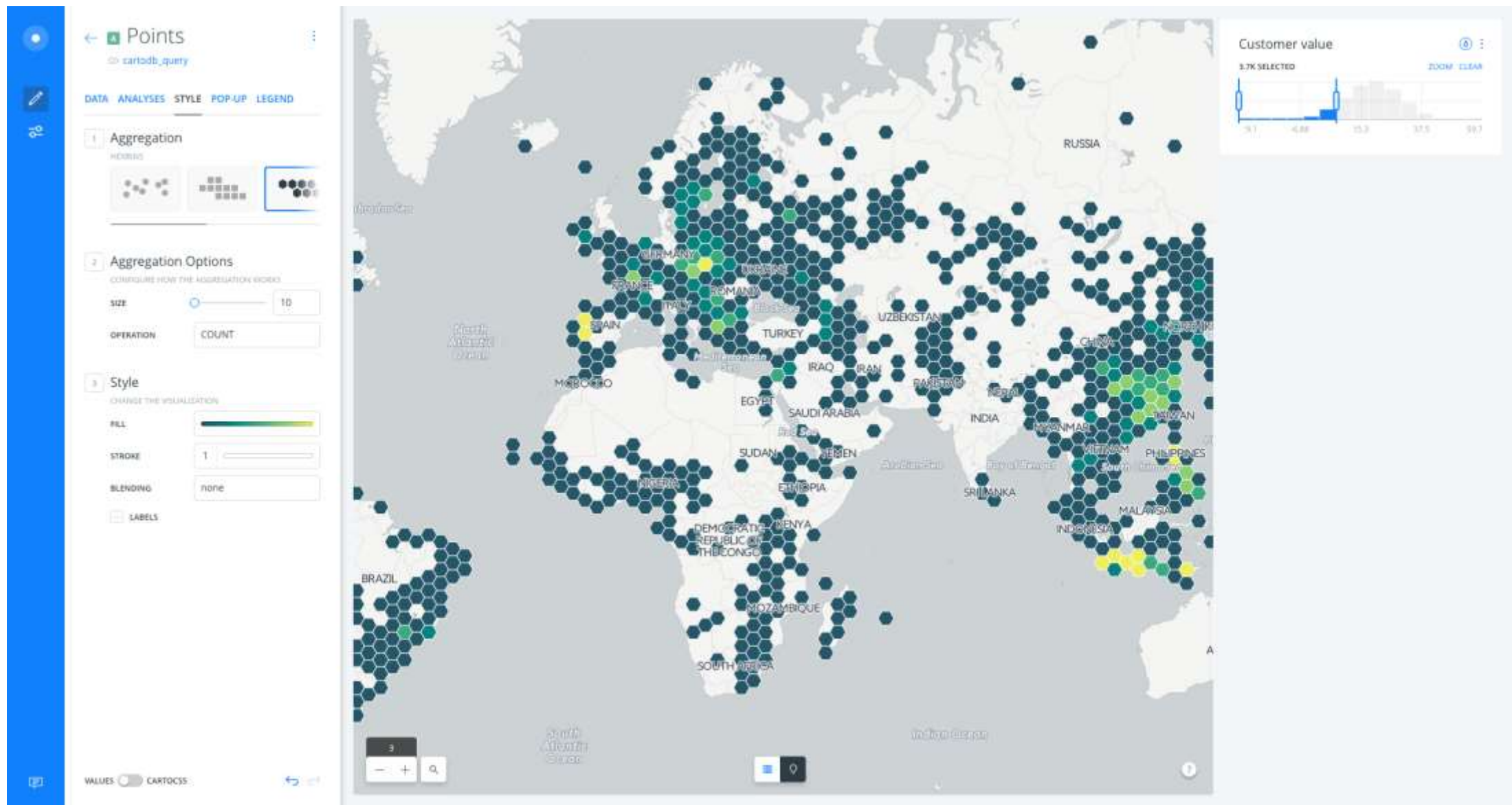
Isla de los productos de datos



Autodesk Dreamcatcher



carto



A person with dark hair in a ponytail, wearing a yellow shirt and a black backpack, is seen from behind, hiking through a mountain valley. The backpack has a yellow cap attached to it. The landscape is filled with green grass, white wildflowers, and scattered evergreen trees. In the background, there are steep, forested mountains under a cloudy sky. The left side of the image is overlaid with a semi-transparent yellow filter.

¡Demo Time!

A person with dark hair in a ponytail, wearing a yellow backpack and a black backpack, is seen from behind, walking along a dirt path in a mountainous landscape. The path is surrounded by green grass and yellow wildflowers. In the background, there are steep, forested mountains with patches of snow on their peaks. The sky is overcast. A semi-transparent yellow vertical bar is on the left side of the image, containing the text.

¡Muchas gracias!

Alejandro Vidal
@doblepensador