So you want to be a Lonely Coder?

Join <u>the club</u>: <u>http://lcc-slack.herokuapp.com/</u>
Download <u>these slides</u>: http://tiny.cc/LCC

Scott Pham | Brent Jones | Alexandra Kanik | Lindsey Cook

Starting Out Lonely



Biographicals

- 2014-ish, Digital Editor for NBC Bay Area Investigative Unit
- Noticed the work of Brent Jones at STL Public Radio
- Started a Slack group after conversation with Meredith Broussard

The Lonely Coders Club

- 100ish digital journalists around the country
- Varying skill levels
- Primarily a Slack group
- Open signs-ups: http://lcc-slack.
 herokuapp.com/



What it means to be a Lonely Coder

Some possibilities:

- None of your immediate colleagues code
- You sometimes do data stuff but mostly have other responsibilities
- You have trouble convincing your colleagues or supervisors that this
 is worthwhile
- You need resources you don't have: servers, admin access, paid online services, learning materials

A Disclaimer

"Lonely Coder" is a useful term, not a real-life under-class

- Most of us NICAR are probably lonely coders
- NICAR is actually very inviting to beginners
- We tend to over-estimate the skills of our peers
- The imposter syndrome is real

What we're going to do today

- Show you resources tools and techniques that get you started fast
- Show you how to leverage early wins to get buy-in and goodwill from your colleagues
- Encourage you to reach out to your Lonely colleagues on the internets

CensusReporter.org

One stop to make stories about places better

Profile

Start typing to pick a place...

or

♀ Search by street address

Find facts

Populations and dollar figures are broken down by category: Demographics, Economics, Families, Housing and Social.

Visualize

Our library of charts gives you insight into data from the places you research. Look for them on profile pages. You can even embed the charts on your own site.

Get context

Pre-computed statistics are presented alongside each data point, so you can see how each place fits into a larger context.

Explore

Find a topic by table or column name...

Explore

Census data is massive, and sometimes it's hard to find the table you're looking for. Search by table and column keywords.

Visualize

We want to help *you* tell great stories. Maps and distribution charts help uncover what's interesting, so you can take it from there.

Download

From any comparison, save the data you're viewing in CSV, Excel or a variety of geographic data formats.

Topics

Learn more about the concepts and tables covered by the Census and American Community Survey. We'll be adding more of these pages in the next few months, so let us know if there are topics you'd like to see us explain.

Getting Started Age and Sex Children

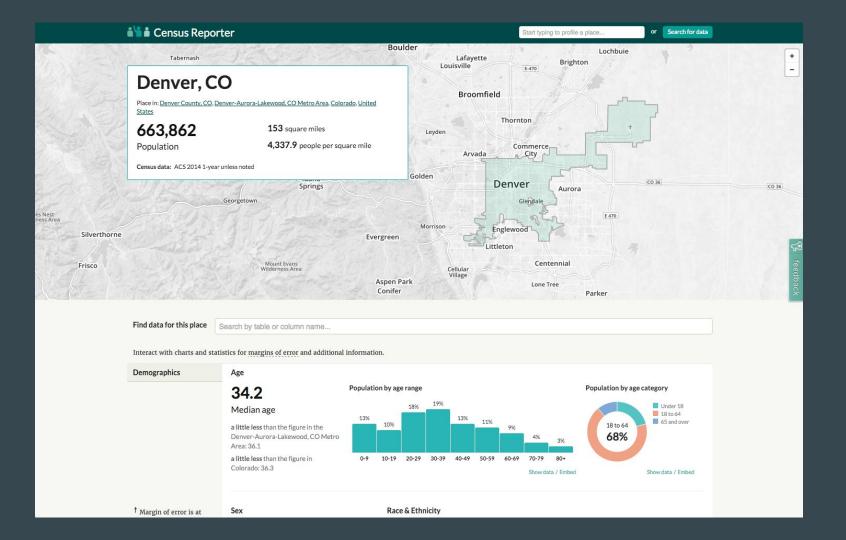
<u>Commute</u> <u>Employment</u> <u>Families</u>

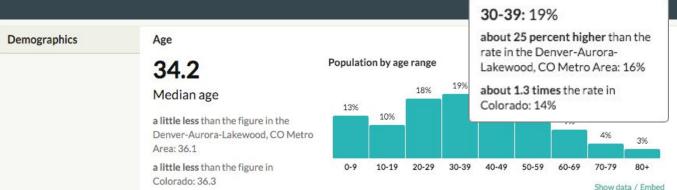
Geography Health Insurance Income

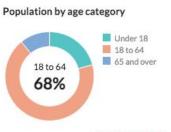
Migration Poverty Public Assistance

Race and Hispanic Origin Same-Sex Couples Seniors

<u>Table Codes</u> <u>Veterans and Military</u>

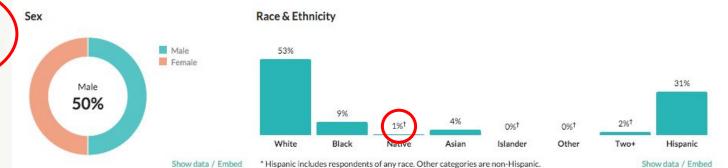






Show data / Embed

† Margin of error is at least 10 percent of the total value. Take care with this statistic.



Population by age range

13%

18%

11%

70-79

Find data for this place

Search by table or column name...

Interact with charts and statistics for margins of error and additional information.

Demographics

Age

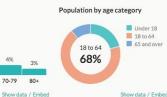


a little less than the figure in the Denver-Aurora-Lakewood, CO Metro Area: 36.1

Colorado: 36.3

a little less than the figure in



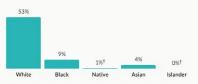


Show data / Embed

† Margin of error is at least 10 percent of the total value. Take care with this statistic.









Show data / Embed

* Hispanic includes respondents of any race. Other categories are non-Hispanic.

10-19 20-29 30-39 40-49 50-59 60-69

Show data / Embed

Economics

Income



Per capita income

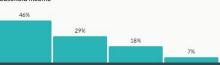
about the same as the amount in the Denver-Aurora-Lakewood, CO Metro Area: \$35,256



Median household income

about 80 percent of the amount in the Denver-Aurora-Lakewood, CO Metro Area: \$66,870





That's great... but how do I use this?

Provide context for your audience

Embed this data as a chart

Aspen Park

Conifer

Find data for this place

Search by table or column name..

Interact with charts and statistics for margins of error and additional information.

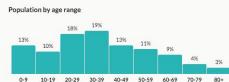
Demographics

Age

34.2

Median age
a little less than the figure in the
Denver-Aurora-Lakewood, CO Metro
Area: 36.1
a little less than the figure in

a little less than the figure in Colorado: 36.3



9 20-29 30-39 40-49 50-59 60-69 70-79 80+ Show the data / Embed

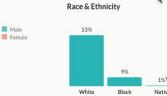


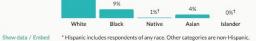


Show the data / Embed

† Margin of error is at least 10 percent of the total value. Take care with this statistic.









Show data / Embed

Economics

Income

\$35,967

Per capita income

\$54,941

Median household income

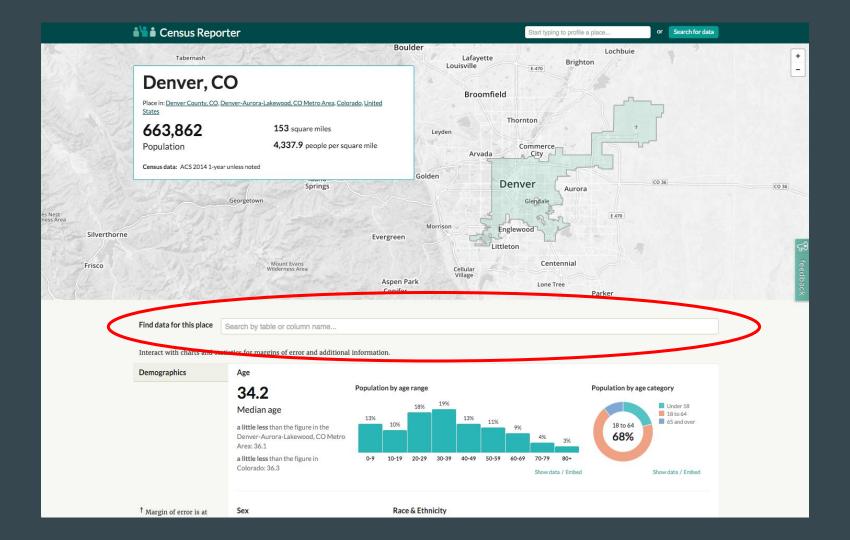
46%

Household income

29%

about the same as the amount in the about 80 percent of the amount in

Download the data, then...???



Population by age range

13%

18%

11%

70-79

Find data for this place

Search by table or column name...

Interact with charts and statistics for margins of error and additional information.

Demographics

Age

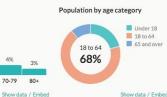


a little less than the figure in the Denver-Aurora-Lakewood, CO Metro Area: 36.1

Colorado: 36.3

a little less than the figure in



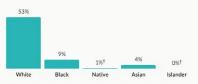


Show data / Embed

† Margin of error is at least 10 percent of the total value. Take care with this statistic.









Show data / Embed

* Hispanic includes respondents of any race. Other categories are non-Hispanic.

10-19 20-29 30-39 40-49 50-59 60-69

Show data / Embed

Economics

Income



Per capita income

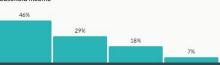
about the same as the amount in the Denver-Aurora-Lakewood, CO Metro Area: \$35,256



Median household income

about 80 percent of the amount in the Denver-Aurora-Lakewood, CO Metro Area: \$66,870





Sex by Age

ble Map Distribution Download data

Table B01001

Change

ACS 2014 1-year

Add data for more places below; visualize or download this data with controls at right.

Selected geographies

Denver, CO Remove

Denver-Aurora-Lakewood,

CO Metro Area Remove
Denver County, CO Remove

Colorado Remove
United States Remove

Add a geography

Find a place

Add all places in ...

Denver County, CO

Denver-Aurora-Lakewood,
CO Metro Area
Colorado
United States

Divide Denver, CO into ... census tracts

block groups
ZIP codes

ACS ZOIT I YEA

Table universe: Total Population

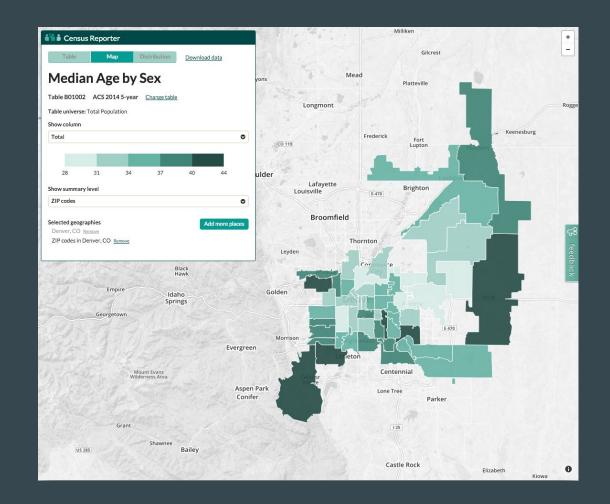
Switch to totals Click a row to highlight

Column	\rightarrow	Colorado		Denver Cour	ty, CO	Denver, CO		Denver-Auro	ora-Lakewood, CO Metro Area	United State	5
Male:	-	50.3%	±0.1%	50%	±0.1%	50%	±0.1%	49.9%	±0.1%	49.2%	±¢
Under 5 y	/ears	3.2%	±0%	3.5%	±0.1%	3.5%	±0.1%	3.3%	±0%	3.2%	±(
5 to 9 year	ars	3.4%	±0.1%	3%	±0.2%	3%	±0.2%	3.6%	±0.1%	3.3%	±(
10 to 14 y	years	3.4%	±0.1%	2.8%	±0.2%	2.8%	±0.2%	3.4%	±0.1%	3.3%	±(
15 to 17 y	years	1.9%	±0%	1.3%	±0.1%	1.3%	±0.1%	1.9%	±0%	2%	±(
18 and 19	9 years	1.4%	±0%	1%	±0.1%	1%	±0.1%	1.1%	±0%	1.4%	±0
20 years		0.7%	±0.1%	0.6%	±0.2%	0.6%	±0.2%	0.5%	±0.1%	0.8%	±(
21 years		0.7%	±0.1%	0.6%	±0.1%	0.6%	±0.1%	0.6%	±0.1%	0.7%	±(
22 to 24 y	years	2.3%	±0.1%	2.1%	±0.2%	2.1%	±0.2%	2.1%	±0.1%	2.1%	±C
25 to 29 y	years	3.9%	±0%	5.7%	±0%	5.7%	±0%	4%	±0%	3.5%	±(
30 to 34 y	years	3.8%	±0%	5.5%	±0%	5.5%	±0%	4.1%	±0%	3.4%	±0
35 to 39 y	years	3.5%	±0.1%	4.4%	±0.3%	4.4%	±0.3%	3.8%	±0.1%	3.1%	±(
40 to 44 y	years	3.4%	±0.1%	3.7%	±0.3%	3.7%	±0.3%	3.6%	±0.1%	3.2%	±(
45 to 49 y	years	3.2%	±0%	3.2%	±0%	3.2%	±0%	3.4%	±0%	3.2%	±(
50 to 54 y	years	3.4%	±0%	2.9%	±0.1%	2.9%	±0.1%	3.5%	±0%	3.5%	±0
55 to 59 y	years	3.2%	±0.1%	2.8%	±0.2%	2.8%	±0.2%	3.2%	±0.1%	3.2%	±(
60 and 61	1 years	1.2%	±0.1%	1%	±0.2%	1%	±0.2%	1.1%	±0.1%	1.2%	±0
62 to 64 y	years	1.7%	±0.1%	1.3%	±0.2%	1.3%	±0.2%	1.5%	±0.1%	1.6%	±(
65 and 66	6 years	1%	±0.1%	0.8%	±0.1%	0.8%	±0.1%	1%	±0.1%	1%	±(
67 to 69 y	years	1.2%	±0.1%	1%	±0.2%	1%	±0.2%	1.1%	±0.1%	1.3%	±0
70 to 74 y	years	1.4%	±0.1%	1.1%	±0.1%	1.1%	±0.1%	1.3%	±0.1%	1.6%	±C
75 to 79 y	years	1%	±0%	0.8%	±0.1%	0.8%	±0.1%	0.8%	±0.1%	1.1%	±0
80 to 84 y	years	0.6%	±0%	0.5%	±0.1%	0.5%	±0.1%	0.5%	±0.1%	0.8%	±(
85 years a	and over	0.5%	±0%	0.5%	±0.1%	0.5%	±0.1%	0.5%	±0%	0.6%	±C
Female:		49.7%	±0.1%	50%	±0.1%	50%	±0.1%	50.1%	±0.1%	50.8%	±C
Under 5 y	/ears	3%	±0%	3.3%	±0%	3.3%	±0%	3.1%	±0%	3%	±0
5 to 9 year	ars	3.2%	±0.1%	3%	±0.3%	3%	±0.3%	3.4%	±0.1%	3.2%	±(
10 to 14 y	years	3.3%	±0.1%	2.6%	±0.3%	2.6%	±0.3%	3.3%	±0.1%	3.2%	±0
15 to 17 y	years	1.8%	±0%	1.3%	±0%	1.3%	±0%	1.8%	±0%	1.9%	±0
18 and 19	9 years	1.2%	±0%	1%	±0%	1%	±0%	1%	±0%	1.4%	±C
20 years		0.6%	±0.1%	0.6%	±0.1%	0.6%	±0.1%	0.5%	±0.1%	0.7%	±(

CSV
Excel
GeoJSON
KML
Shapefile

But that's not all...

- Easily navigate geographies
- Create choropleth maps and switch between data or geography easily
- Look at distributions
- Find tips on the blog
 (censusreporter.tumblr.com) like
 how to make embeddable maps
 from Census Reporter Data
- Follow Census Reporter on Twitter @CensusReporter
- There's an API!



Interactive Tables

Tables can be rad

Scale Rows by Population		(75	香		6
		Ted Cruz	Donald J. Trump	Marco Rubio	Ben Carson	John Kasich
Sex	Male 51% of voters	42%	36%	14%	4%	3%
	Female 49% of voters	38	29	21	4	4
Age	18-29 10% of voters	29	21	29	7	2
	30-44 21% of voters	41	35	17	5	2
	45-64 42% of voters	42	31	19	3	3
	65 and over 27% of voters	39	35	12	3	6
Race and ethnicity	White 82% of voters	41	34	16	3	3
	Black 3% of voters	_	-	_	-	_
	Hispanic/Latino	32	26	26	5	2

Easiest data viz to get off the ground

The majority of the data you encounter will be tabular:

	Α	В	С	D	E
1	rank	name		address	phone
2		Asher Brewing Company		4699 Nautilus Ct S, Ste 104, Boulder, CO 80301	(303) 530-1381
3		Avery Brewing Company	Avery recently relocated to a bigger, better space with even more capacity for creating some of the country's best barrel-aged, sour beers.	4910 Nautilus Ct,Boulder, CO 80301	(303) 440-4324
4		Black Bottle Brewery	Looking for one of the best beer lists in the state? Head to Black Bottle Brewing, and prepare to get a little weird.	1611 S College Ave Suite 1609,Fort Collins, CO 80525	(970) 493-2337
5		Black Shirt Brewing Co.	This RiNo brewery focuses on red ales, and it has one of the more unique beer list displays in town.		(303) 993-2799
6		Breckenridge Brewery	Breckenridge Brewery, which originally opened in downtown Breckenridge 25 years ago, has grown to be one of the country's 50 largest breweries. Its new digs in Littleton are expansive, on a campus that includes the recently opened Farm House restaurant. Tours of the brewery must be booked		
7		Boulder Beer Company	Boulder Beer Company was the very first craft brewery in the state of Colorado.	2880 Wilderness Pl,Boulder, CO 80301	(303) 444-8448
8	F1/0	Bristol Brewing Company	This Colorado Springs brewery recently relocated to the old <u>lyywild</u> School, where visitors can enjoy an onsite restaurant, butcher, bakery, cocktail bar, community gardens, and more.		(719) 633-2555
9		Casey Brewing &	Move over Crooked Stave— Colorado has a newer cult-followed brewery famous for its barrel- aged sour beers. Expect long lines (that are well worth the wait) when Casey releases his new		

Pretty it up

Eater.com's list of 38 essential Denver breweries							
Name 💠	Description	Address	Phone 🛊				
Fate Brewing Company	World-class Kölsch and finger-lickin' barbecue has quickly put Fate on the map as a must-visit Boulder brewery.	1600 38th St,Ste 100, Boulder, CO 80301	(303)449- 3283				
Wit's End Brewery	Wit's End is another brewery that began brewing one barrel at a time. This humble and comfortable watering hole is well-known for its flagship blonde ale, Jean-Claude Van Blonde.	2505 W 2nd Ave Unit 13,Denver, CO 80219	(303) 359-9119				
Upslope Brewery	Upslope is quickly making a name for itself in the brewing world. With award-winning beers and a fantastic taproom in North Boulder, this is one spot that is not to be missed.	1898 S Flatiron Ct,Boulder, CO 80301	(303) 396-1898				
Tivoli Brewing Company	Tivoli Brewing is almost back in action. Brewing will continue in this historic building as early as the end of this month.	900 Auraria Parkway,Denver, CO 80204	(303) 582-6039				
Black Shirt Brewing Co.	This RiNo brewery focuses on red ales, and it has one of the more unique beer list displays in town.	3719 Walnut St,Denver, CO 80205	(303) 993-2799				
Prost Brewing	This LoHi brewery produces traditional German styles of beer on a classic copper brewhouse imported from Europe.	2540 19th St,Denver, CO 80211	(303) 729-1175				

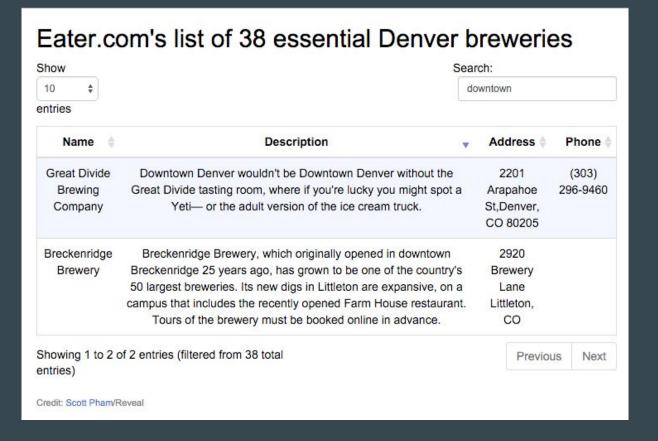
Sample Code

```
1
2
  <thead>
3
  4
5
  6
  </thead>
  8
  . . .
9
  10
```

Make that table sortable

State	▼ # Religious day cares	Federal funding received**		
▲ Virginia	994	\$23,148,122		
Alabama	916	\$123,437,846		
Indiana	662	\$111,969,297		
Missouri	522	\$35,626,304		
¬ Florida	407	\$28,554,835		
→ North Carolina*	373	Data not available		

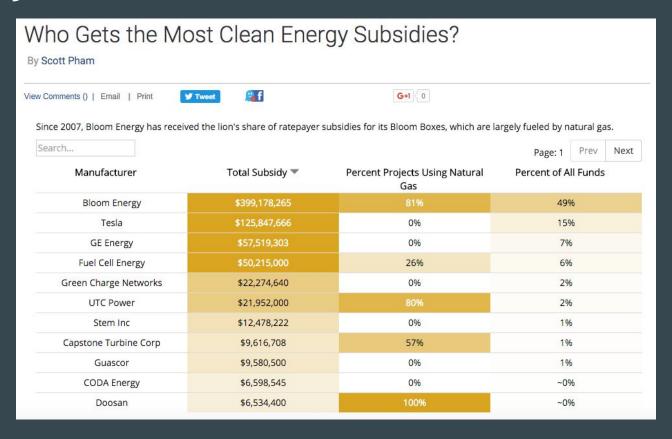
Make it sortable, searchable AND paginated



Put everything in the cloud

- Chris Keller's Tabletop to Datatables
- Lisa William's Illustrated Guide
- My Tabletop to Datatables Fork

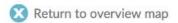
Part of your toolset



Little to no regulation

Church day care facilities face few rules in these states. At some religious day cares, workers don't need to have any child safety training or follow any staff-to-child ratios. In Alabama, Indiana, Missouri and North Carolina, religious day cares can use corporal punishment to discipline children. Freedom from state regulations does not prevent religious day cares from collecting millions of dollars in federal funding.

State	▼ # Religious day cares	Federal funding received**		
Virginia	994	\$23,148,122		
Alabama	916	\$123,437,846		
 ■ Indiana	662	\$111,969,297		
Missouri	522	\$35,626,304		
→ Florida	407	\$28,554,835		
→ North Carolina*	373	Data not available		





Credits: <u>Scott Pham</u>/Reveal Research and reporting by <u>Amy Julia Harris</u>/Reveal



Getting buy-in



Getting buy-in

- Small wins build demand
- Demand can help with roadblocks
- Build incrementally to stay productive while you learn

Why so lonely?



Alexandra Kanik

Graphic Design



2006 - 2010

Web design



2010 - 2011

Design, development, data, +++



2011 - 2015

Development, data, editing/writing



2015 - current

The lonely coder's cocktail

github

browser developer tools

LCC/NICAR-L

Google

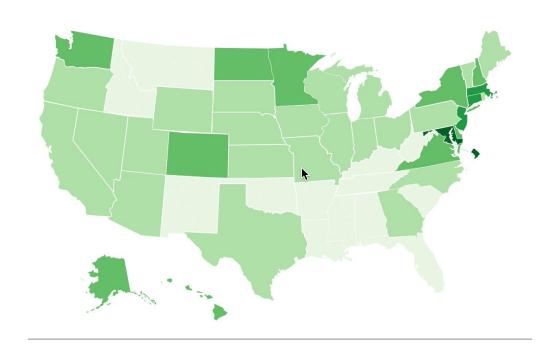
The importance of Github



I cannot overstate the importance of Github as a learning tool. The ability to "Frankenstein" projects, or take projects that you know to be functional and replace bits and pieces to customize them, is a great way to **learn on the job**.

Landline / Stateline / Topline

Have state/county data that you need to visualize quickly?



Saturday Github sessions

GitHub 101

Independence 2:15 p.m. - 3:15 p.m.

GitHub 201

Independence 4:45 p.m. - 5:45 p.m.

Browser developer tools



Browser developer tools are some of the strongest diagnostic tools that you'll come across when trying to fix web-based issues. Browser developer tools are also a great way to get a look at dynamically-generated CMS code so you can manipulate it with CSS or javascript.

Opening developer tools

Community: LCC / NICAR-L

"Lonely, but not alone"

Joining online coder communities is essential if you're trying to go it alone.

When you're on deadline and you're just not understanding the problems you're up against, it's invaluable to know that you've got a support system of more experienced coders.

You can and should also use these communities as a way of sharing ideas and expanding your knowledge of how others are solving data journalism problems with code.

Let me google that for you...

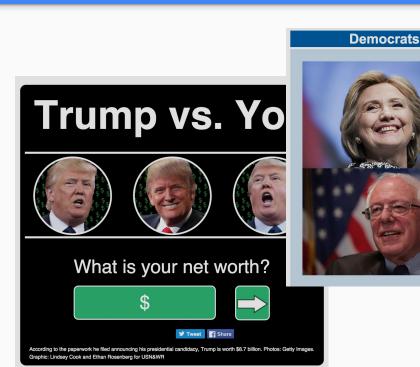


Learn how to ask the Google questions. Not all questions are created equal. Having good google skills will save you a lot of time when trying to find answers to questions that you're pretty sure others have had. I'm pretty close to believing that there are no issues that Google can't find an answer to.

Lindsey Cook

Data Editor, U.S. News & World Report

Big Projects



8 campaign buttons 57 campaign buttons CHRISTIE2 Chris Christie Ended: Feb. 10, 2016



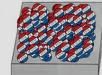












211 campaign buttons

Republicans

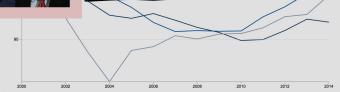


411 campaign buttons

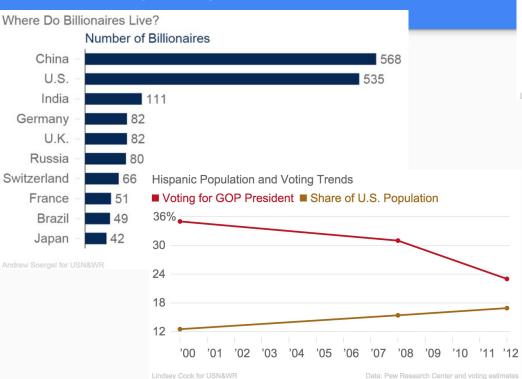


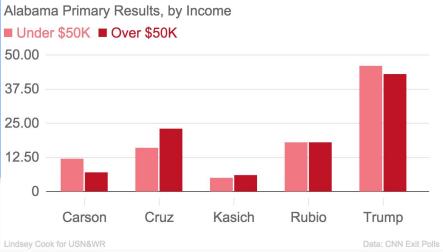
asures science, technology, engineering and mathematics activity in the U.S.

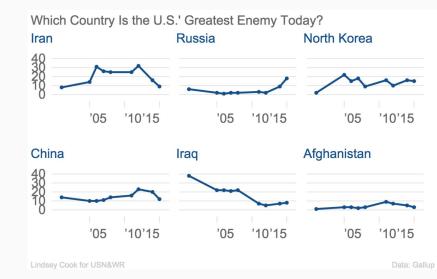
ook, Matt Mason, Robert Morse and Alan Neuhauser | June 29, 2015 | 12:01 a.m. EST | Tweet | ¶ Share



Everyday Charting







Quartz's Chartbuilder

https://quartz.github.io/Chartbuilder/

Make it Yours and Host it Free on Github

http://lindseycook.io/chartbuilder2/

See the tipsheets for the step-by-step details