# The evolution of a Shiny app with wine, beer, Python and R

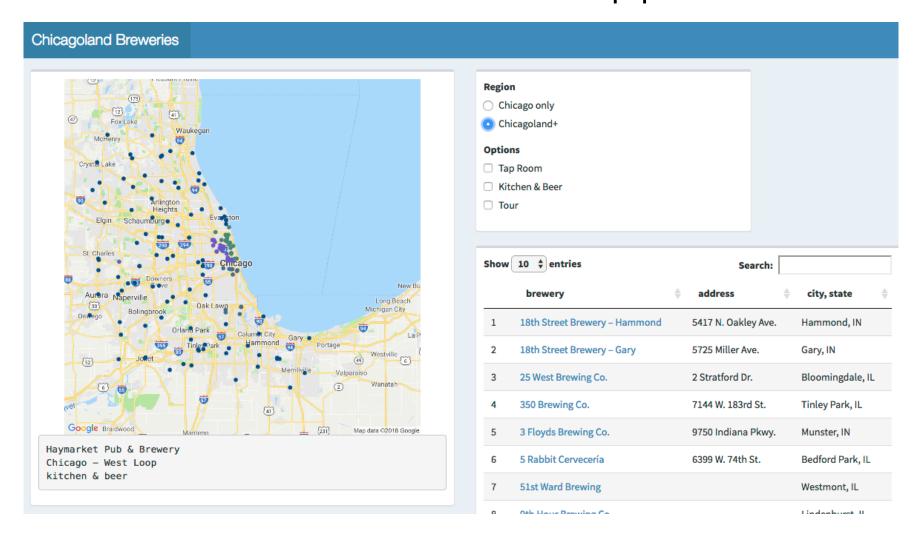
Eleanor Chodroff

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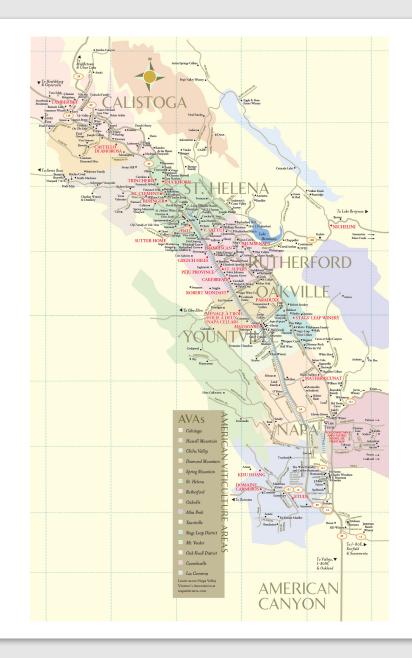


## www.eleanorchodroff.com/apps/brews.html



## Weekend in Napa Valley

- One weekend
- 400+ wineries





#### Napa/Sonoma Recommendations 🦙 👫





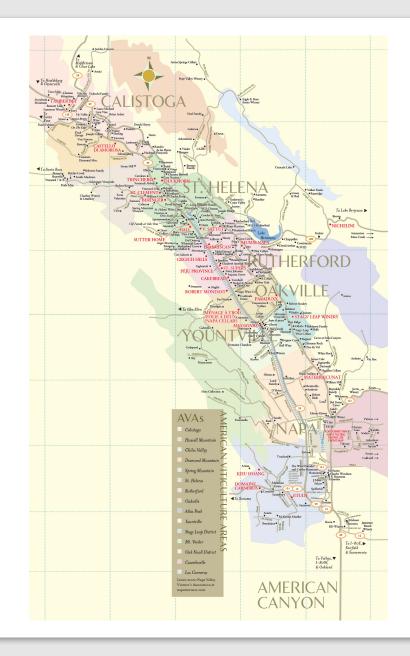
File Edit View Insert Format Data Tools Add-ons Help

fx	f <sub>X</sub> Vineyard								
	Α	В •	<b>D</b>	E	F	G			
1	Vineyard	City	Known for	Rec/notes	Website	Address	LK		
2	Dutton Goldfield	Sebastopol (Russian River/Dry Creek)	Pinot Noir	This is a pretty well known place for Pinot Noir, and the guys at the tasting room are super friendly. The wines are a little pricey, but the tasting fee is reasonable.	https://www.duttongoldfield.com/	3100 Gravenstein Hwy N Sebastopol, CA 95472			
3	Cade	Angwin (Napa)	Sauvignon Blanc	Kelsey: great wines, epic view, appointment only so and they only take 12 people so call them soon to make an appointment// F&W:The views of the valley floor are glorious from this super-sustainable, LEED   Gold—certified winery, located on Howell Mountain.  Guests can taste Cade's superb Sauvignon Blanc in its chic outdoor living room.  360 Howell Motor of the control of the co		360 Howell Mountain Rd South Angwin, CA 94508			
4	O'Shaughnessy	Angwin (Napa)	Cabernet	Everything about Paul and Betty Wooll's secluded, Cabernet-focused winery is state of the art, from the glass-and-stone cellar to the 11,000-square-foot cave drilled into the side of Howell Mountain. Yet the building manages to blend into its natural surroundings.  www.oshaughnessywinery.com Angwin, Ca		Angwin, Ca			
5	Cuvaison	Calistoga	Syrah	Really fantastic Syrah and a great view of Carneros from the deck. This place is really special!	www.cuvaison.com/	4550 Silverado Trail N, Calistoga, CA 94515			
6	Larkmead	Calistoga		French Laundry Sommolier rec	https://larkmead.com	1100 Larkmead Ln, Calistoga, CA 94515			
7	Schramsberg	Calistoga	Blanc de blanc	A visit here includes a sampling of four sparkling wines (served at the White House on numerous occasions), a tour of the 125-year-old caves and a lesson in Champagne's méthode traditionelle.	www.schramsberg.com	1400 Schramsberg Rd, Calistoga, CA 94515			
8	Joseph Swan	Forestville (Russian River/Dry Creek)	Pinot Noir	One of the oldest wineries in the area, and they back-age their wines so you will taste older vintages of Pinot like 2007 and 2008.	www.swanwinery.com	2916 Laguna Rd Forestville, CA 95436			
9	Dry Creek Vineyard	Healdsburg		Quintessentially Group rec	http://www.drycreekvineyard.com	3770 Lambert Bridge Rd, Healdsburg, CA 95448			
10	Porter Creek	Healdsburg	Pinot Noir, Syrah and Carignan.	My favorite winery in RR, with incredible Pinot (for a good price), Syrah and Carignan. It's also just a really cute, low key atmosphere.	www.portercreekvineyards.com	8735 Westside Rd Healdsburg, CA 95448			
11	Preston	Healdsburg	Rhone varietals (Carignan, Syrah, Grenache, Rousanne, Mourvedre)	This is a really great winery in Dry Creek that specializes in Estate Grown, organic Rhone varietals (Carignan, Syrah, Grenache, Rousanne, Mourvedre). They also have picnic grounds, and the tasting room is really cooly	prestonvineyards.com	9282 W Dry Creek Rd Healdsburg, CA 95448	<u>^</u>		

## Weekend in Napa Valley

## Planning the itinerary

- "Scenic", "views", "pretty"
- Price
- Wine tasting availability
- Location (optimize the route)

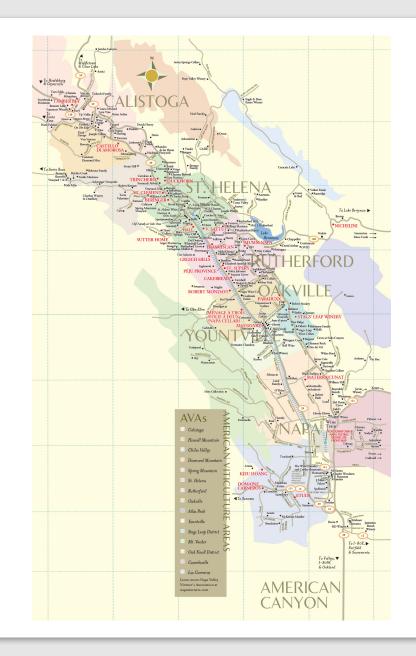


## Design an app

## Optimize the itinerary:

- "Scenic", "views", "pretty
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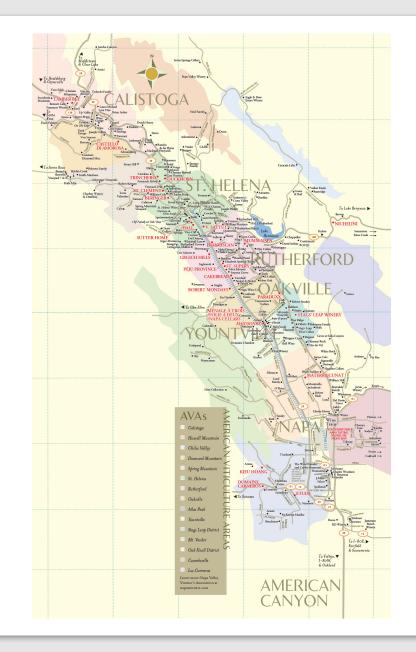
## My skills:

- Know some R and Python
- Rudimentary R Shiny skills

## Feasible Shiny app:

- Map out wineries
- Subset by city/region
- Subset by keyword

→ Visualize the search process

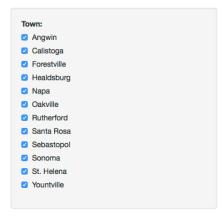


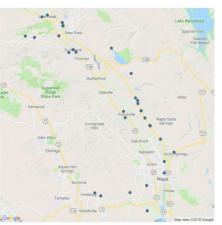
## Creating a map in R: ggmap

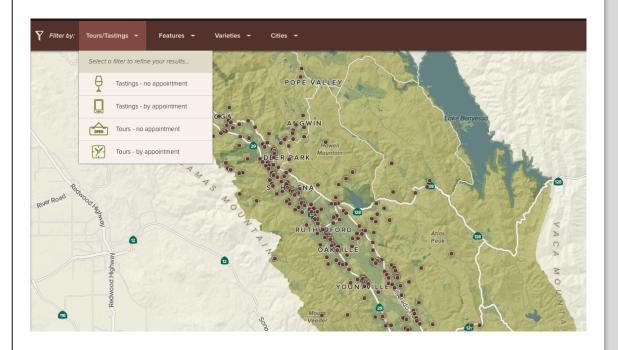
Creating a map in R: ggmap

Obtaining geographic coordinates from addresses: Census Geocoder – U.S. Census Bureau

#### California wineries: Recommendations from some friends of friends







New plan: Brewery map

## Goal:

Proof of concept for myself



## "scrape" beeradvocate.com

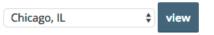
## Create usable dataset with Python:

- Name of brewery
- Address
- Website
- Brewery features (tour, food, tap room)



#### Beer Guide: Chicago, Illinois

Beer guide to breweries, brewpubs, bars, stores, events and festivals, and recent visits in the Chicago area



#### **Breweries:**

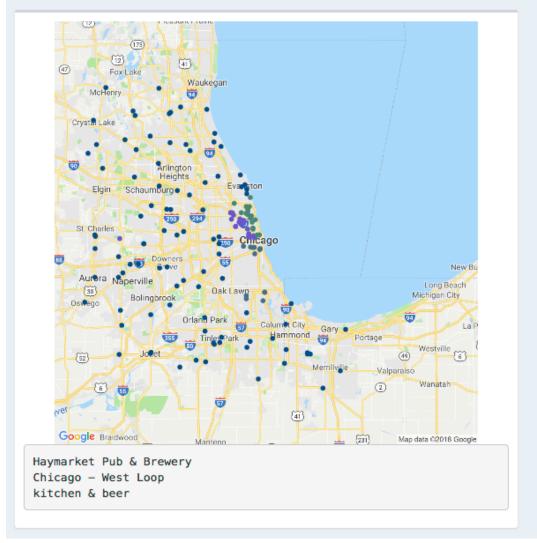
- · Saint Errant Brewing 1800 W. Cuyler Ave., Chicago
- Dovetail Brewery 1800 W Belle Plaine Ave, Chicago
- Pipeworks Brewing Company 3912 W McLean Ave, Chicago
- Off Color Brewing 3925 W Dickens Ave, Chicago
- · Spiteful Brewing 2024 W Balmoral Ave, Chicago
- Revolution Brewing 2323 N Milwaukee Ave, Chicago
- Metropolitan Brewing 3057 N Rockwell Ave, Chicago
- Corridor Brewery & Provisions 3446 N Southport Ave, Chicago
- Lagunitas Brewing Company 1843 S Washtenaw Ave, Chicago
- Half Acre Beer Company 4257 N Lincoln Ave, Chicago
- Marz Community Brewing 3630 S Iron St, Chicago
- Cervecería Cruz Blanca 904 W Randolph Ave, Chicago
- Maplewood Brewery & Distillery 2717 N Maplewood Ave, Chicago
- Illuminated Brew Works 415 N Sangamon St, Chicago
- Haymarket Beer Co. Pub & Brewery 737 W Randolph St, Chicago
- Forbidden Root Restaurant & Brewery 1746 W Chicago Ave, Chicago
- Whiner Beer Company 1400 W 46th St, Chicago
- Old Irving Brewing Co. 4419 W Montrose Ave, Chicago
- Lake Effect Brewing Co. 4727 W Montrose Ave, Chicago
- Begyle Brewing Company 1800 W Cuyler Ave, Chicago
- DryHop Brewers 3155 N Broadway St, Chicago
- · Local Option 1102 W Webster Ave, Chicago
- Exit Strategy Brewing Co. 7700 Madison St, Forest Park
- On Tour Brewing Company 1725 W Hubbard St, Chicago
- Goose Island Beer Co. 1800 W Fulton St, Chicago
- Piece Brewery & Pizzeria 1927 W North Ave, Chicago
- Great Central Brewing Company 221 N Wood St, Chicago
- Burnt City Brewing 2747 N Lincoln Ave, Chicago
- Moody Tongue Brewing Company 2136 S Peoria St, Chicago

## App features:

- ggmap of Chicagoland and Chicago
- color coding by area
- subsetting by brewery features
- searchable table
- hover option over the dots (Euclidean distance between map point and mouse cursor)

www.eleanorchodroff.com/apps/brews.html

#### Chicagoland Breweries



Region
○ Chicago only
<ul><li>Chicagoland+</li></ul>
Options
☐ Tap Room
☐ Kitchen & Beer
☐ Tour

Show 10 ¢ entries		Search:		
	brewery	\$	address $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	city, state
1	18th Street Brewery – Hammond		5417 N. Oakley Ave.	Hammond, IN
2	18th Street Brewery – Gary		5725 Miller Ave.	Gary, IN
3	25 West Brewing Co.		2 Stratford Dr.	Bloomingdale, IL
4	350 Brewing Co.		7144 W. 183rd St.	Tinley Park, IL
5	3 Floyds Brewing Co.		9750 Indiana Pkwy.	Munster, IN
6	5 Rabbit Cervecería		6399 W. 74th St.	Bedford Park, IL
7	51st Ward Brewing			Westmont, IL
0	Oth Haus Drawing Ca			Lindonhumt II

### What I learned:

- Possible to code a Shiny app in a day or two (or less)
- Improvements are always incremental and take time
- Skills generalize
- Having a strong concept is a powerful motivator
- Concepts often arise from a mixture of problems and interests



## Thanks!

