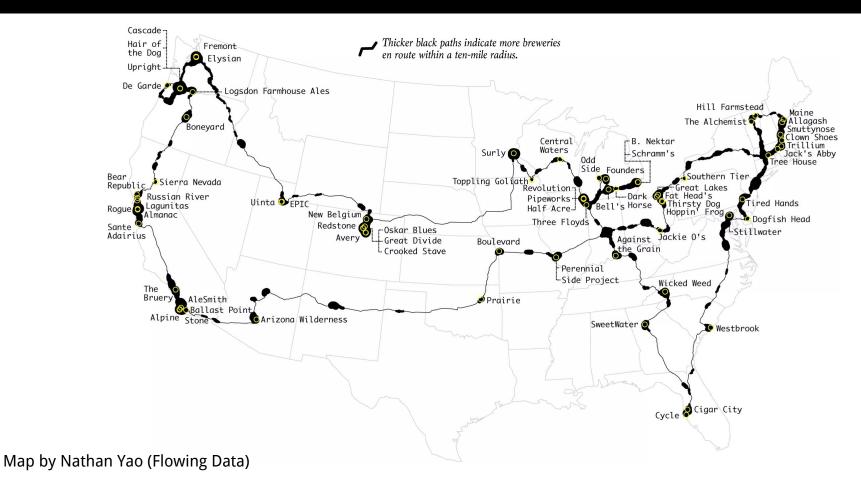
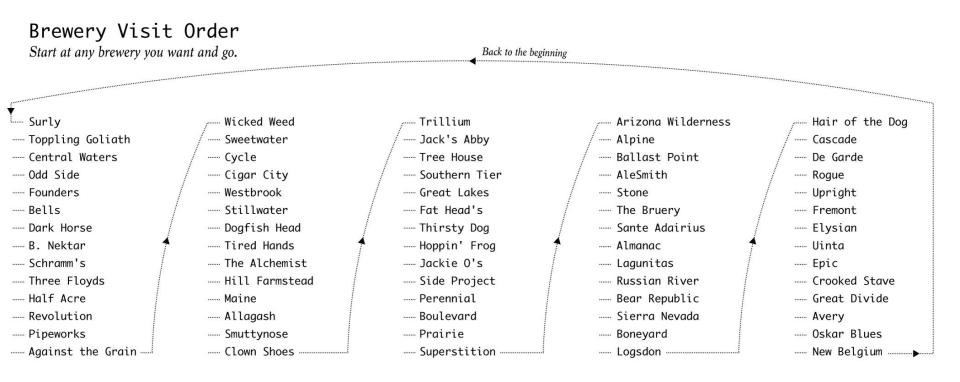
Top Brewery Road Trip, Routed Algorithmically



The Highest Rated US Breweries

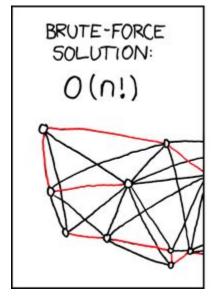


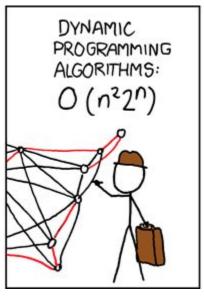
Randy Olson's Road Trip Objectives:

- 1. The trip must make at least one stop in all 48 states in the contiguous U.S.
- The trip would only make stops at National Natural Landmarks, National Historic Sites, National Parks, or National Monuments.
- 3. The trip must be taken by car and never leave the U.S.

The Traveling Salesman Problem

50 Landmarks \longrightarrow 50! = 3 x 10⁶⁴ possible routes







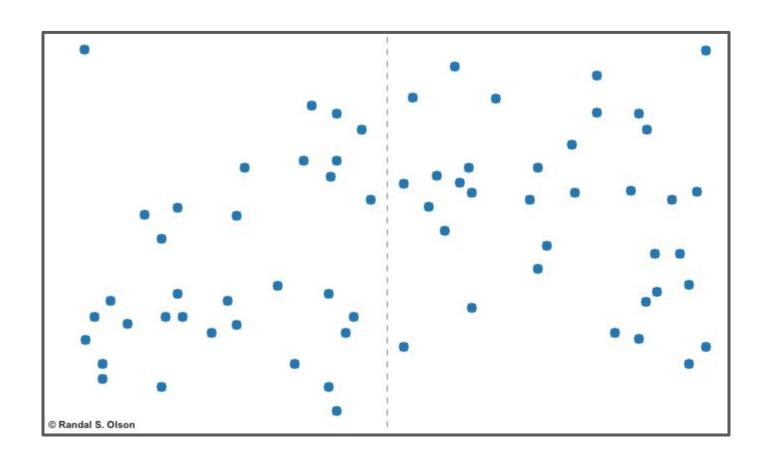
Genetic Algorithms

Based on Natural Selection

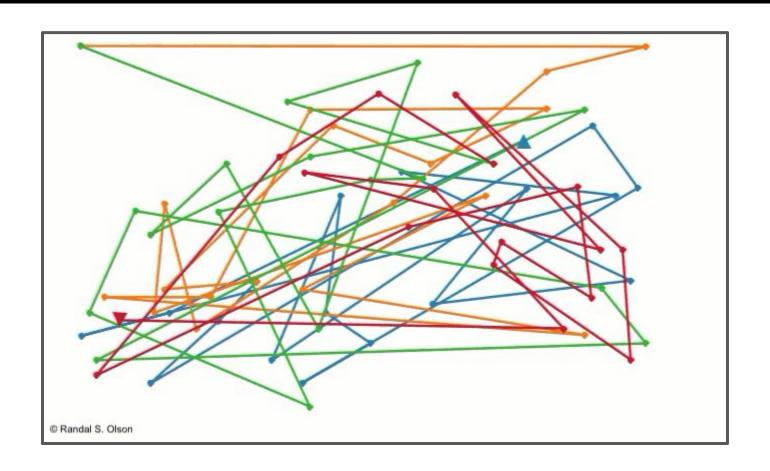
"Instead of exhaustively looking at every possible solution, genetic algorithms start with a handful of random solutions and continually tinker with these solutions — always trying something slightly different from the current solution and keeping the best one — until they can't find a better solution any more."

Does not produce the perfect solution, but will reliably produce a pretty good solution.

Waldo Locations in Where's Waldo



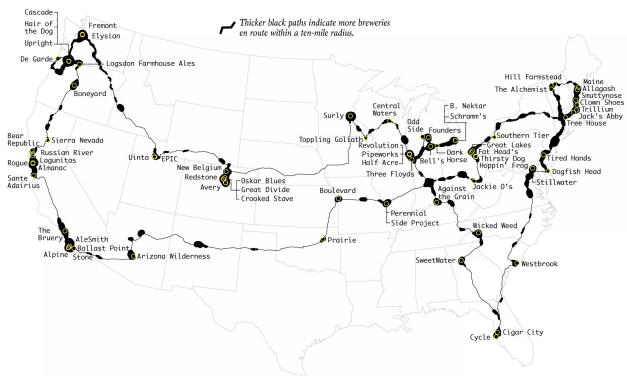
Where's Waldo: Search Path Optimization



50 U.S. Landmarks: Optimized Routes



Generated by Randy Olson using Google Maps Distance Matrix API



TOP BREWERY STOPS

70

These are the top rated breweries in the conterminous United States.

EN ROUTE

1,414

Make the most out of the trip and visit the many breweries and brewpubs in between. STATES VISITED

28

The top breweries are located here, but you drive through a total of 40 states.

DRIVING HOURS

197

If only visiting the top breweries, there is over 8 full days' worth of travel.

DRIVING MILES

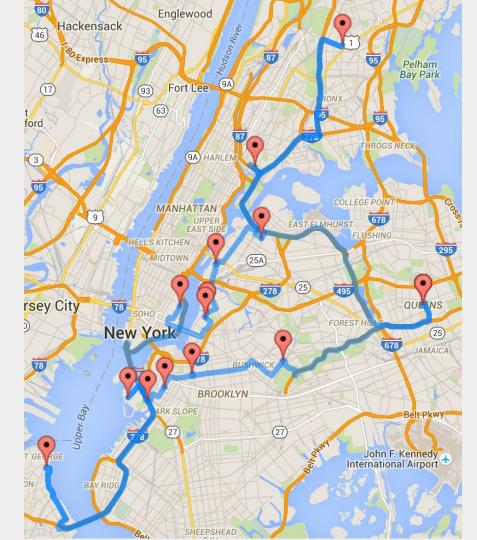
12,299

Computing the shortest route to all breweries, you still have some driving to do. Worth it.

nyc_breweries =

["Alphabet City Beer Co., Avenue C, New York, NY", "Big Alice Brewing, 43rd Road, NY", "Bridge and Tunnel Brewery, Decatur Street, Queens, NY", "**The Bronx Brewery**, East 136th Street, Bronx, NY", "Brooklyn Brewery, North 11th Street, New York, NY", "Finback Brewery, Queens, NY", "The Flagship Brewing Company, Minthorne Street, Staten Island, NY", "Greenpoint Beer and Ale, North 15th Street, Brooklyn, NY", "Greenpoint Beer Works, Waverly Avenue, Brooklyn, NY", "**Gun Hill** Brewing Company, Laconia Avenue, Bronx, NY", "LIC Beer Project, Queens, NY", "Other Half **Brewing Company**, Centre Street, Brooklyn, NY", "Rockaway Brewing Company, Queens, NY", "SingleCut Beersmiths, 37th Street, Queens NY", "Sixpoint Brewery, Van Dyke Street, Brooklyn, NY", "**Threes Brewing**, Douglass Street, New York, NY", "Transmitter Brewing, Queens, NY"]

nyc_breweries =



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