Silicon Valley (a term popularized by Don Hoeffler) is a region of California known for the Semiconductor Industry. The monetization of semiconducors started in the 1960’s in the Santa Clara Valley, by companies in San Jose, Santa Clara, Cupertino, Sunnyvale, Mountain View and Palo Alto. Stanford University, Hewlett-Packard, and Fairchild Semiconductor played huge roles in the start and growth of this region.

The Santa Clara Valley, mosly rural and famous for growing fruit and garlic, had the stable foundations required for vibration-sensitive wafer lithography and wafer test equipment. Densly populated urban areas like San Francisco were not suitable for this work. San Francisco was not considered part of Silicon Valley in the early days.

What changed was the booming software industry, which did not have the same physical constraints as semiconductor. Software heated up in the late 1990s in many places unsuitable for silicon manufacturing, such as downtown San Francisco or lower Manhattan in New York City.

These days people consider the Silicon Valley to include San Francisco, despite the objections of silicon-purists like me. (Silicon and software are not the same).

I enjoyed using map\_libre again for a Figure Friday project. The code includes a function to wrap hover text across multiple lines. This is very useful for long descriptive strings. I used Chat GPT to make a table with longitude and latitude of these companies, and stored them in this file: “df\_norcal\_coords.csv”.

The code for this visualization is posted here on plotly community, however to run it you need the file with longitude and latitude values. You can get everything from:

* Git Repo: <https://github.com/Mike-Purtell/Plotly_FF_2024.git>
* Folder: Week\_52\_Stocks.

Here is a map\_libre view of the Bay Area, showing where most of the companies are located. The marker sizes and colors are tied to Market Cap.

A screenshot of a computer screen

Description automatically generated

Here is a view of software companies clustered in downtown San Francisco.

A screenshot of a computer

Description automatically generated