11.1.2

JavaScript in the Real World

While JavaScript is increasingly used in advanced programming and machine learning settings, Dana is curious about it because she's heard it can make websites more functional and dynamic, which she definitely wants her webpage to be. Dana envisions a really cool, interactive dashboard, but she'll have to dig into the details to learn more!

JavaScript is one of the powerhouse languages out in the wild today. While its strength is in creating visually appealing and dynamic content, it is starting to grow into other fields as well. Tensorflow, a popular machine learning tool, even has its own JavaScript library now.

It's pretty easy to start feeling daunted by everything JavaScript can do, so Dana is more interested in examples of similar websites—ones that use filters on lots of data.

- **Online shopping websites:** These are a great example of dynamic content. They contain filters for departments, and then filters for items within those departments. Filters on top of filters!
- **Ecological data:** The National Ecological Observatory Network (NEON) (https://data.neonscience.org/browse-data?showAllDates=true&showAllSites=true&showTheme=org) has very large and diverse datasets; these are also displayed on their website as dynamic tables with multiple filters.
- **Weather data:** The National Snow & Ice Data Center (NSIDC) (https://nsidc.org/data/search/#keywords=permafrost/sortKeys=score,,desc/facetFilters=%257B%257D/pageNumber=1/itemsPerPage=25) also has very large datasets presented in table format on their website. These tables include filters and parameters that can be applied to their table.