

Homework 6

This homework is due on Apr. 3, 2025 at 11:00pm. Please submit as a pdf file on Canvas.

We will work with the dataset `trees` that contains information about various trees in San Francisco. You can find out more about this dataset here: <https://github.com/rfordatascience/tidytuesday/blob/master/data/2020/2020-01-28/readme.md>

The dataset we will be working with here has been simplified and cleaned up and contains three columns, `species` (the tree species), `year` (the year the tree was planted), and `diameter` (the diameter of the tree, in inches).

```
trees
```

```
# A tibble: 8,719 × 3
  species                                year diameter
  <chr>                                <dbl>     <dbl>
1 Lophostemon confertus :: Brisbane Box 1969      16
2 Pittosporum undulatum :: Victorian Box 1969      21
3 Pittosporum undulatum :: Victorian Box 1969      14
4 Pittosporum undulatum :: Victorian Box 1969      20
5 Pittosporum undulatum :: Victorian Box 1969      14
6 Pittosporum undulatum :: Victorian Box 1969      20
7 Pittosporum undulatum :: Victorian Box 1969      13
8 Pittosporum undulatum :: Victorian Box 1969      12
9 Magnolia grandiflora :: Southern Magnolia 1969      15
10 Magnolia grandiflora :: Southern Magnolia 1969       3
# i 8,709 more rows
```

For this homework, you will be visualizing this dataset. Pick any visualization you like, but use all three columns of the dataset. Appropriate visualizations may include but are not limited to scatter plots, strip charts, box plots, sina plots, density plots, histograms, or ridgeline plots.

Problem 1: (10 pts) Make the worst possible visualization of this dataset you can imagine. Really make it ugly. Don't hold back. For full points, you must customize the plot theme, axes, and color scales (if used).

```
# Add your code here
```

Problem 2: (10 pts) Now make the best possible visualization of this dataset you can imagine. Try your best to come up with a beautiful, polished, publication-quality visualization. For full points, you must customize the plot theme, axes, color scales (if used). Also, for full points, the plot must be legible and clear.

```
# Add your code here
```