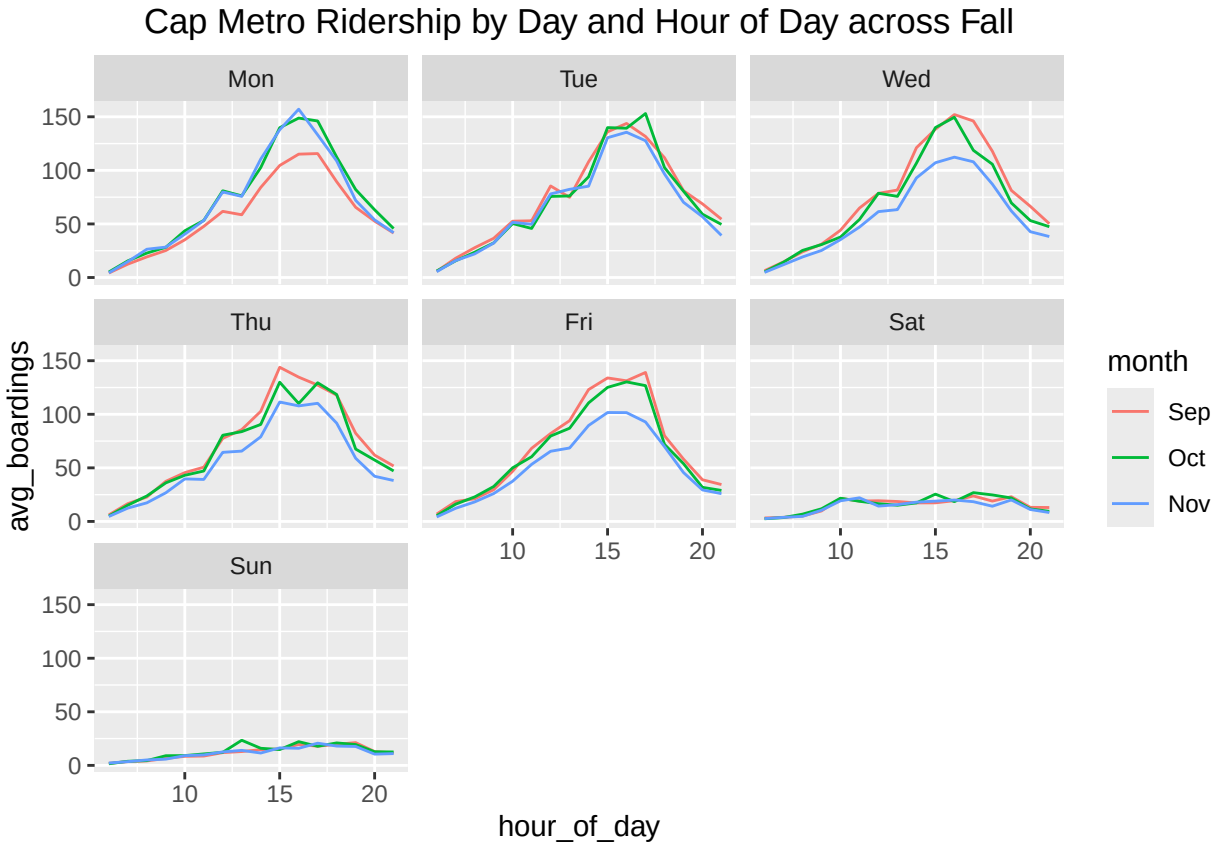
Visual story telling part 2: Capital Metro data

When looking at the Capital Metro data, there are a few interesting patterns.

Below is a graph that shows the Cap Metro average number of boardings across different days of the week and months.

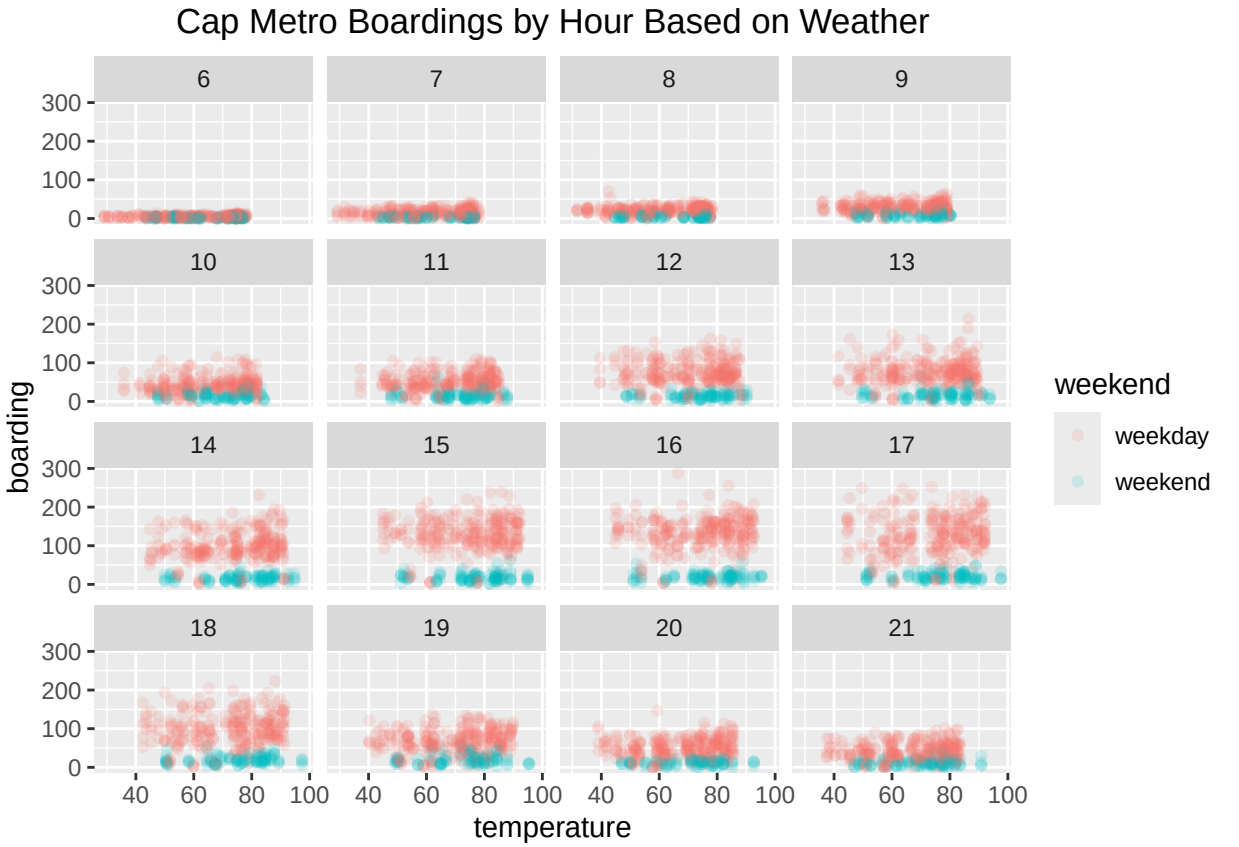


The peak boarding hour tends to be the same, around 5 PM, during the weekdays while there is no clear peak boarding times during the weekends, as not many people are using Capital Metro then.

One interesting piece of this visualization is the clear lower average boarding on Mondays for September versus Mondays for October and November. A possible explanation for lower average boardings on Mondays in September compared to other months and days would be due to Labor Day falling on a Monday, which could have drastically lower average boardings due to it being a holiday.

Another interesting piece of this visualization is the dip in average boardings on Wednesday, Thursday, and Friday in November compared to September and November. A possible explanation for this is look lower due to Thanksgiving Break, which occurs from Wednesday through Friday in November.

Below is another graph which dives into the relationship between Cap Metro boardings by hour based on the weather.



Each separate graph represents a different hour of the day on 24-hour time, with 6 meaning 6 AM and 21 meaning 9 PM. The red dots represent when the boarding occurs on a weekday while the blueish-green dot represents boarding that occurs during the weekend.

When we hold hour of day and weekend status constant, temperature does not seem to have a noticeable effect on the number of UT students riding the bus because the amount of boardings seems to remain similar, meaning that temperature may not be a driving reason for someone to use the Capital Metro system.