

ECO 395 Homework 1: Annie Nguyen

Annie Nguyen

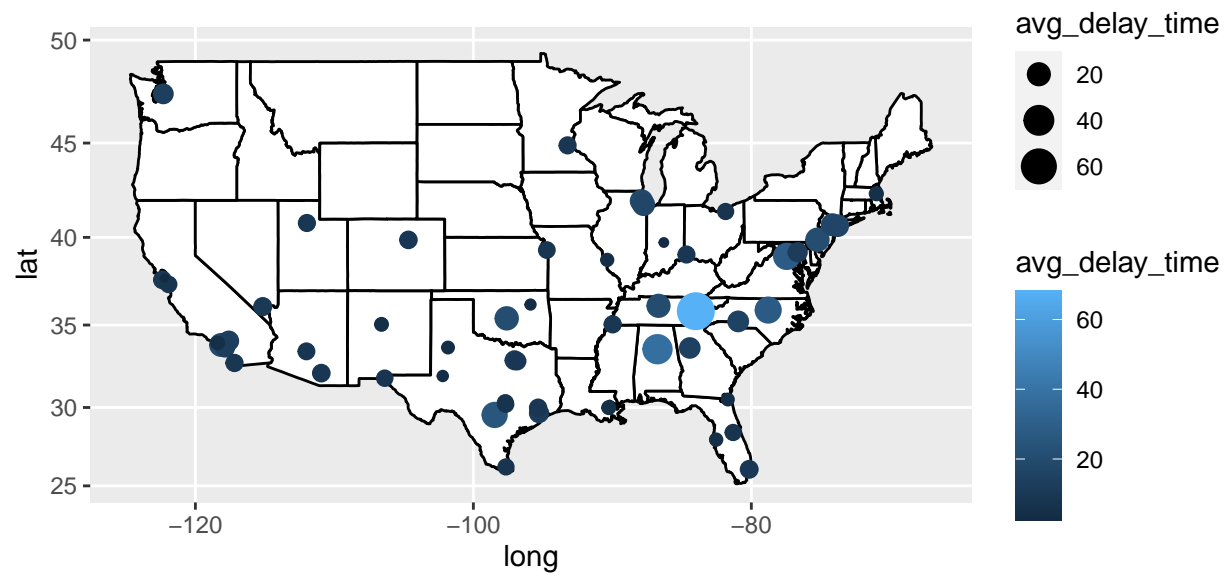
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1) Data Visualization: Flights at ABIA

```
library(ggplot2)
library(tidyverse)
library(ggmap)
abia <- read.csv("ABIA.csv")
airport_codes <- read.csv("airport-codes.csv")
```

```
us_map <- map_data(map = "state")
airport_codes <- airport_codes %>% separate(col = coordinates, into= c("lat", "long"), sep = ",") %>%
  transform(lat = as.numeric(lat), long = as.numeric(long)) %>% select(iata_code, lat, long) %>% drop_na()
avg_delay <- abia %>% group_by(Origin) %>% summarise(avg_delay_time = mean(DepDelay, na.rm = TRUE)) %>%
  left_join(airport_codes, by= c("Origin" = "iata_code"))
```

```
ggplot(avg_delay) + geom_polygon(aes(long, lat, group = group), fill= "white", color="black", data= us_map) +
  coord_map() + geom_point(aes(long, lat, size = avg_delay_time, color = avg_delay_time))
```



2) Wrangling the Olympics

```
olympics <- read.csv('olympics_top20.csv')
```

3) K-Nearest Neighbors: Cars

```
sclass <- read.csv('sclass.csv')
```