

AC4: Visualize Geolocated Data

CSE6242 - Data and Visual Analytics - Spring 2017

Ebeid ElSayed - Ebeid@gatech.edu

March 7, 2017

Data section This section contains detailed steps to load airports, routes, airlines data from <http://openflights.org> . In order to save TA's time final preprocessed dataframe attached to this assignment (USAirports.csv).

Analysis section Using the preprocced data frame, sort the airports descendingly by number of routes passing through. Then plot the top 10 airports over a map of USA.

```
if(!rawDataExist){ # Try load the preprocessed data frame
  USAirports <- read.csv(file = "USAirports.csv", sep=",")
}
USAirports <- USAirports[order(-USAirports$NumRoutes),]
Top10USAirports <- USAirports[1:10,]

chart <- ggplot() +
  borders("usa", colour="gray50", fill="gray50") +
  geom_point(aes(x=Top10USAirports$Longitude, y=Top10USAirports$Latitude) ,color="blue", size=3) +
  ggtitle("Figure 1 - Top 10 most connected airports in USA")
plot(chart)
```

Figure 1 – Top 10 most connected airports in USA

