

# MATH513 Big Data and Social Network Visualization Coursework

VSK

‘r Sys.Date()

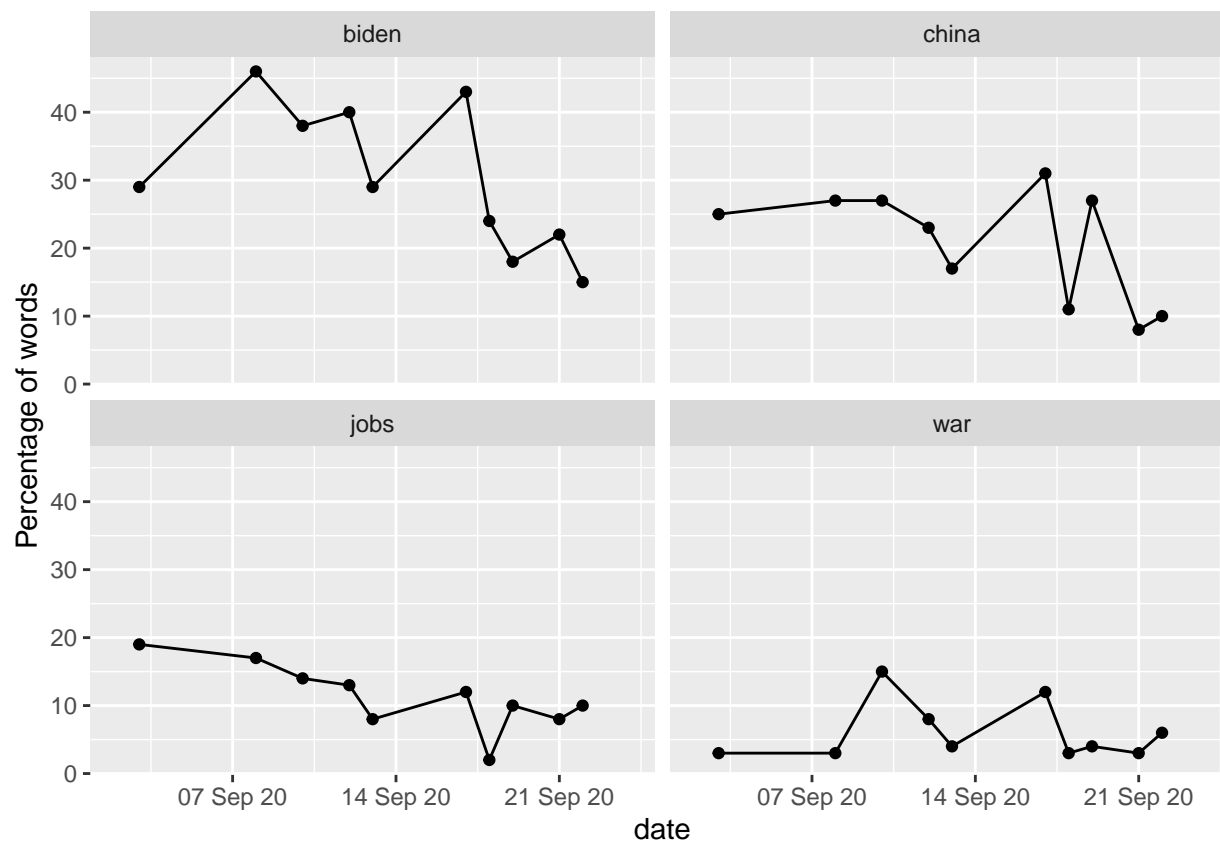
## 2.1 Data Preparation

```
## # A tibble: 10 x 3
##   speech                                location  date
##   <chr>                                <chr>    <date>
## 1 "So thank you Pennsylvania, very much. I'm thrilled to~ Latrobe  2020-09-03
## 2 "Well, thank you very much. Thank you. Thank you very ~ Winston  2020-09-08
## 3 "We brought you a lot of car plants, Michigan. We brou~ Freeland 2020-09-10
## 4 "Well, I thank you very much. So I want to start by sa~ Minden  2020-09-12
## 5 "Thank you, thank you. Wow. Wow, and I'm thrilled to b~ Henderson 2020-09-13
## 6 "Thank you, thank you very much. Thank you very much. ~ Mosinee  2020-09-17
## 7 "There's a lot of people. That's great. Thank you very~ Bemidji  2020-09-18
## 8 "What a crowd, what a crowd. Get those people over her~ Fayettevi~ 2020-09-19
## 9 "Wow, that's a big crowd. This is a big crowd. Thank y~ Ohio     2020-09-21
## 10 "Doesn't have the power. Doesn't have the staying powe~ Pittsburgh 2020-09-22
```

## 2.2 Writing an R Function Showing the Change of Word Frequency Over Time

```
## Joining, by = "word"

## # A tibble: 35,120 x 3
##   location date      word
##   <chr>    <date>    <chr>
## 1 Latrobe  2020-09-03 pennsylvania
## 2 Latrobe  2020-09-03 thrilled
## 3 Latrobe  2020-09-03 latrobe
## 4 Latrobe  2020-09-03 home
## 5 Latrobe  2020-09-03 late
## 6 Latrobe  2020-09-03 friend
## 7 Latrobe  2020-09-03 arnold
## 8 Latrobe  2020-09-03 palmer
## 9 Latrobe  2020-09-03 guy
## 10 Latrobe 2020-09-03 guy
## # ... with 35,110 more rows
```



## 2.3 Plotting the Words with Highest tf-idf Value

```
## Loading required package: data.table
```

```
##
```

```
## Attaching package: 'data.table'
```

```
## The following objects are masked from 'package:lubridate':
```

```
##
```

```
## hour, isoweek, mday, minute, month, quarter, second, wday, week,
```

```
## yday, year
```

```
## The following objects are masked from 'package:dplyr':
```

```
##
```

```
## between, first, last
```

