## CSC 371 - Final Project

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This project is to illustrate data visulazation techniques used on the Victoria Marathon 2016 dataset (https://connex.csc.uvic.ca/access/content/group/788529df-e04c-4ee7-a7e7-886b19555ec0/misc/victoria\_marathon\_2016.sql)

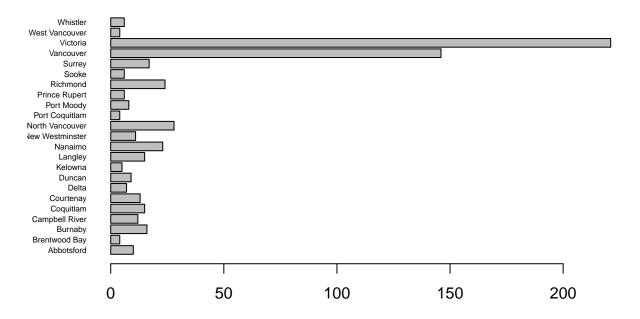
Sqlite3 was used to convert the victoria\_marathon\_2016.sql into a .csv file which was then analyzed using R.

Three particular aspects of the dataset was chosen to be analyzed

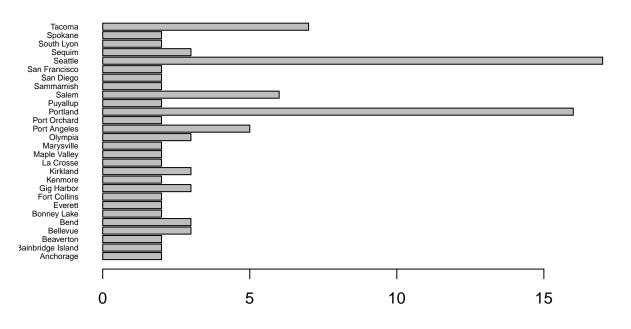
- Distribution of Marathoners by Hometown
- Distribution of Marathoners by Division
- Distribution of Marathoner Finish Times filtered by Division and Hometown

#### Plots of Distribution of Marathoner's Home Town

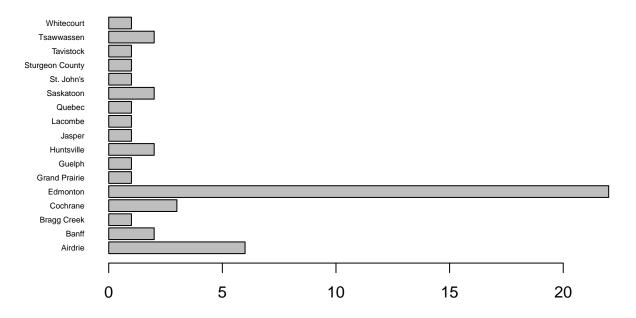
## Distribution of BC Marathoner's Hometowns (at least 3 people from the city)



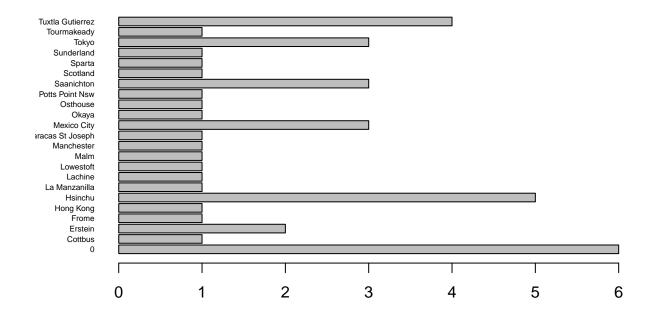
## Distribution of US Marathoner's Hometowns (at least 2 people from the city)



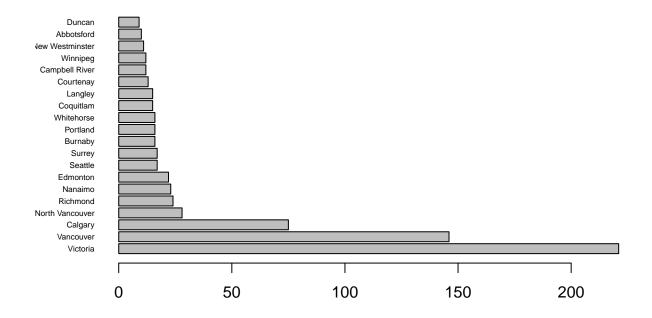
# Distribution of Canadian Marathoner's Hometowns from outside of B (at least 2 people from the city)



### Distribution Marathoner's Hometown outside of Canada/US

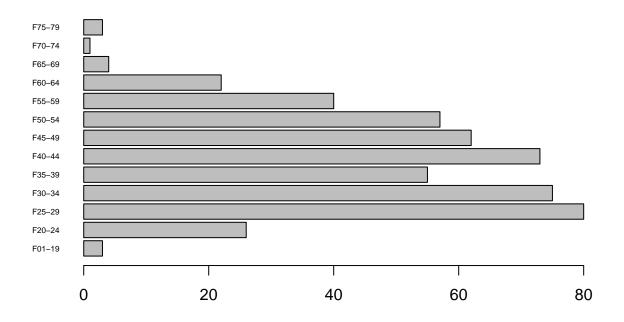


**Top 20 City Representation by Marathoners** 

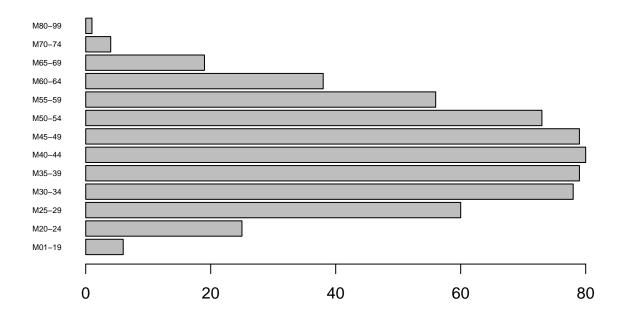


## Age Distribution by Gender

### **Distribution of Age of Female Marathoners**

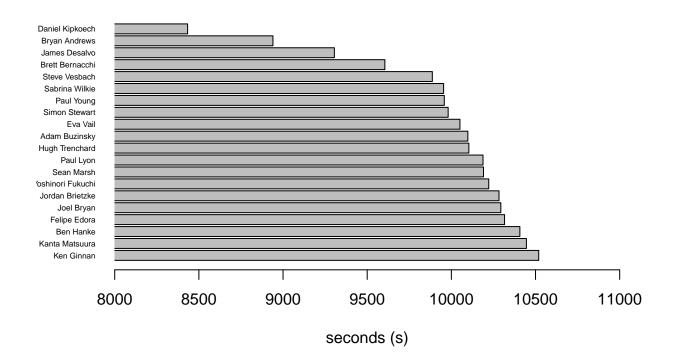


## **Distribution of Age of Male Marathoners**

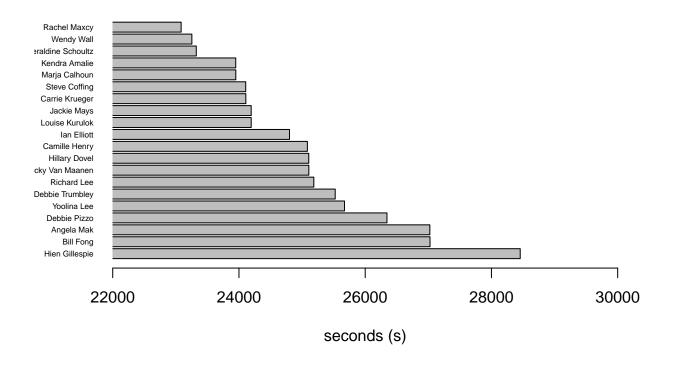


#### Distribution of Finish Times

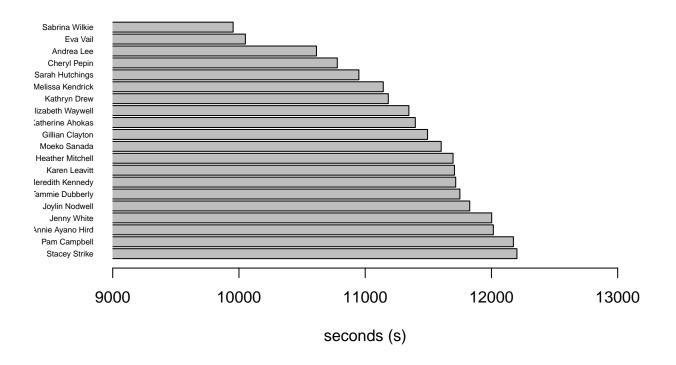
**Top 20 Marathoner Finish Times** 



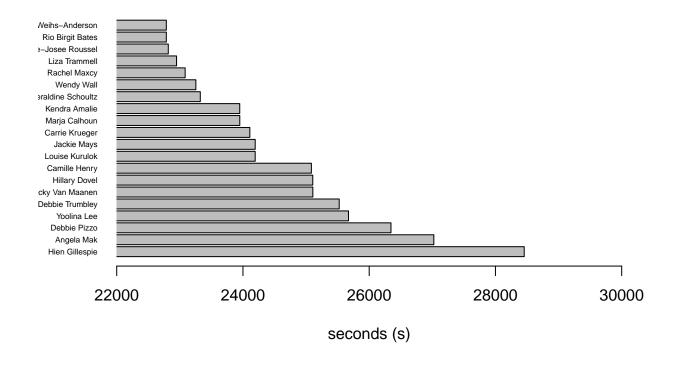
#### **Bottom 20 Marathoner Finish Times**



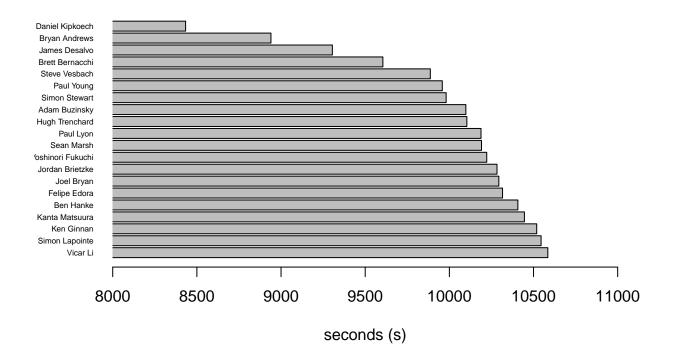
**Top 20 Female Marathoner Finish Times** 



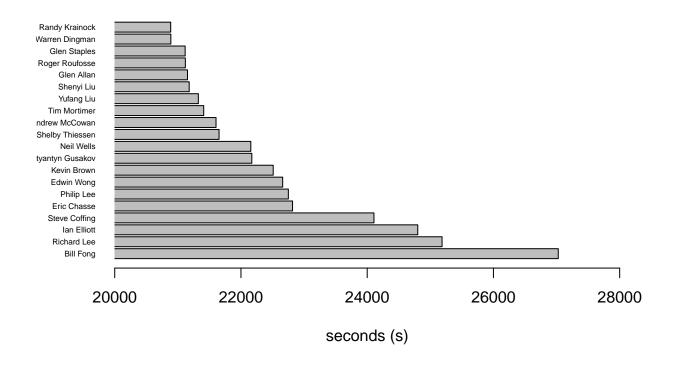
#### **Bottom 20 Female Marathoner Finish Times**



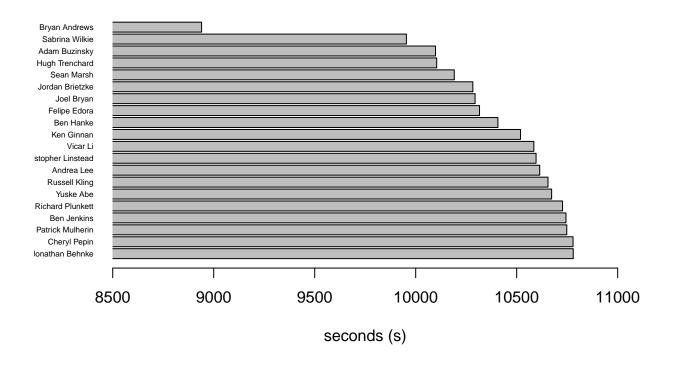
**Top 20 MaleMarathoner Finish Times** 



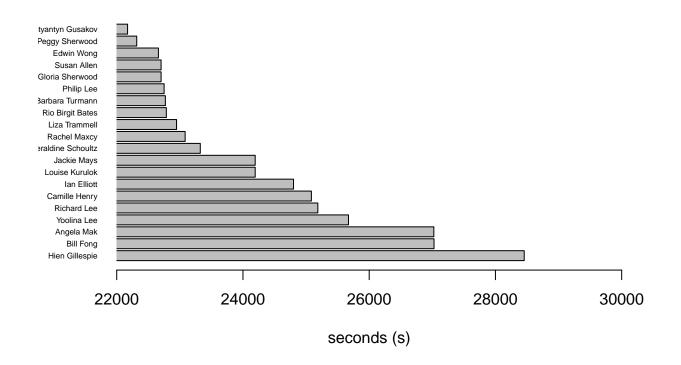
#### **Bottom 20 Male Marathoner Finish Times**



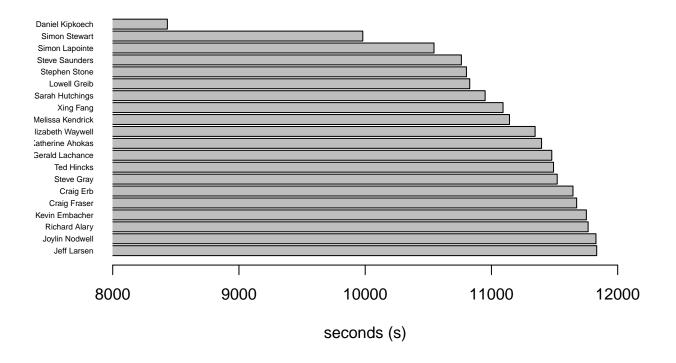
**Top 20 BC Marathoner Finish Times** 



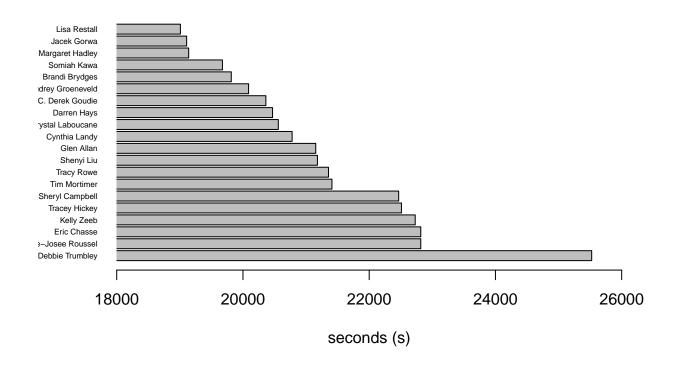
#### **Bottom 20 BC Marathoner Finish Times**



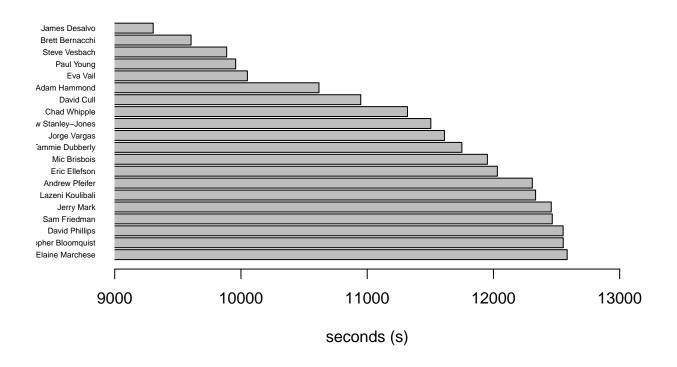
**Top 20 BC Marathoner Finish Times** 



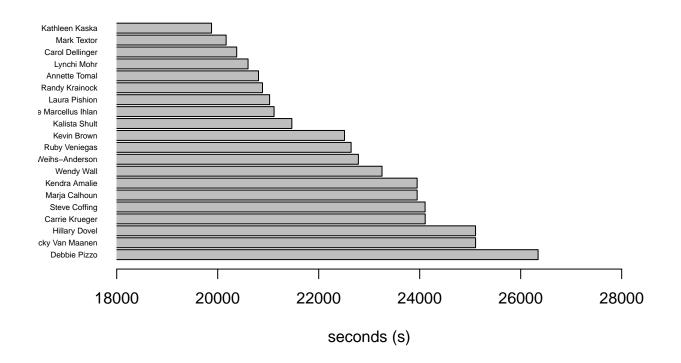
#### **Bottom 20 Non-BC Canadian Marathoner Finish Times**



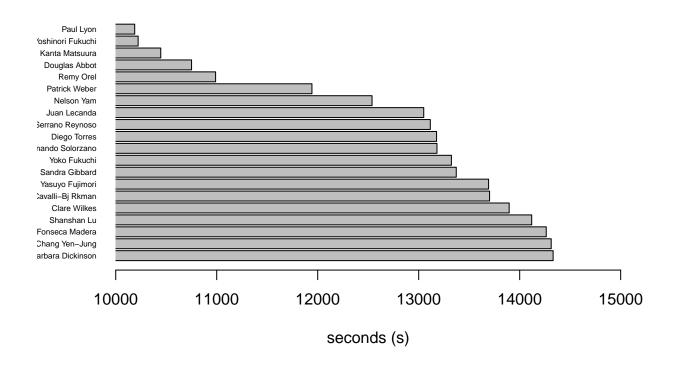
**Top 20 American Marathoner Finish Times** 



#### **Bottom 20 American Marathoner Finish Times**



Top 20 non Canadian/American Marathoner Finish Times



#### **Bottom 20 non Canadian/American Marathoner Finish Times**

