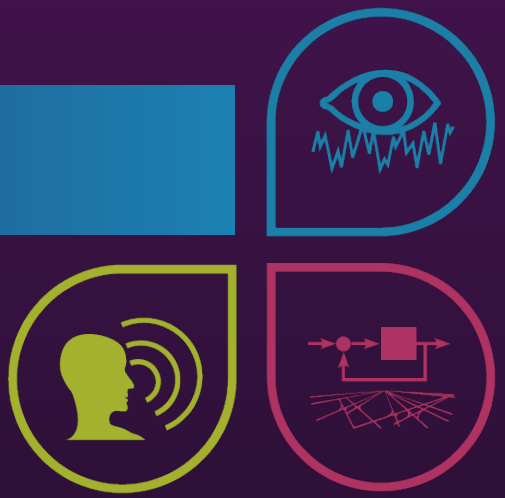
gipsa-lab

Grenoble | images | parole | signal | automatique | laboratoire

Kaggle Kernels presentation



MLST presentation

Julien MUZEAU

GIPSA-lab

28/03/2018

cnrs Grenoble INP Université Grenoble Alpes UMR 5216

Introduction

KB –> MB –> GB –> TB –> ?B

FIFA 18 complete player dataset

Pokemon battles

Introduction (1)

What is Kaggle ?

kaggle is a platform which proposes data mining competitions.

Anyone can participe and produce his own model for describing a specific dataset (usually provided by companies).

What is Kaggle Kernels ?

Kaggle Kernels is a cloud computational environment.

- Equivalent to Jupyter Notebook
- Supports **R** and **Python** languages
- Easy project setup (no need to download librairies . . .)
- Collaborative platform

Introduction (2)

Why ?

Develop a similar project with MLST members (at least those willing to participate . . .)

Let us see some examples !

Introduction

KB –> MB –> GB –> TB –> ?B

FIFA 18 complete player dataset

Pokemon battles

KB –> MB –> GB –> TB –> ?B (1)

Dataset

Eclipse MegaMovie : pictures from US citizens during total solar eclipse on August 21^{st}, 2017
Contains camera model, date, GPS coordinates, width, height, detected circle, US state, ...

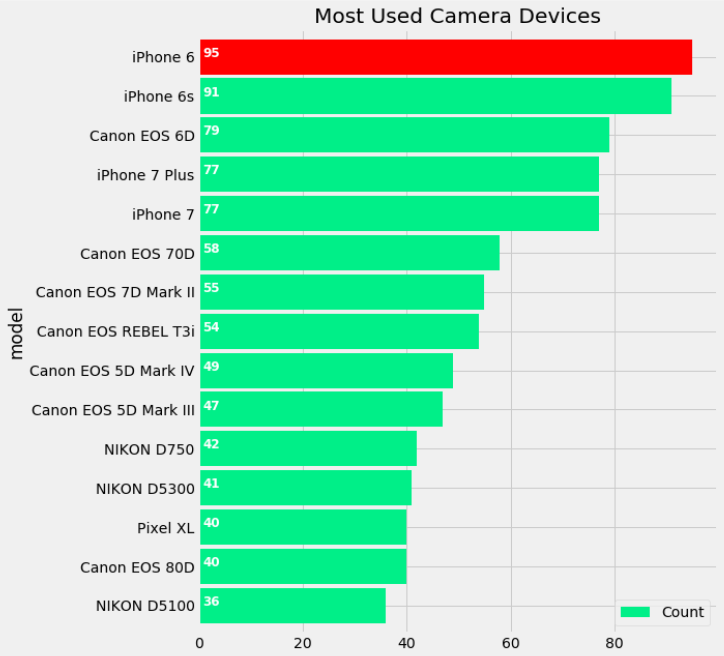
Problem

Huge dataset

Solution

Use **S**tructured **Q**uery **L**anguage (Google BigQuery)

KB –> MB –> GB –> TB –> ?B (2)


Most Used Camera Devices
model
iPhone 6
iPhone 6s
Canon EOS 6D
iPhone 7 Plus
iPhone 7
Canon EOS 70D
Canon EOS 7D Mark II
Canon EOS REBEL T3i
Canon EOS 5D Mark IV
Canon EOS 5D Mark III
NIKON D750
NIKON D5300
Pixel XL
Canon EOS 80D
NIKON D5100
95
91
79
77
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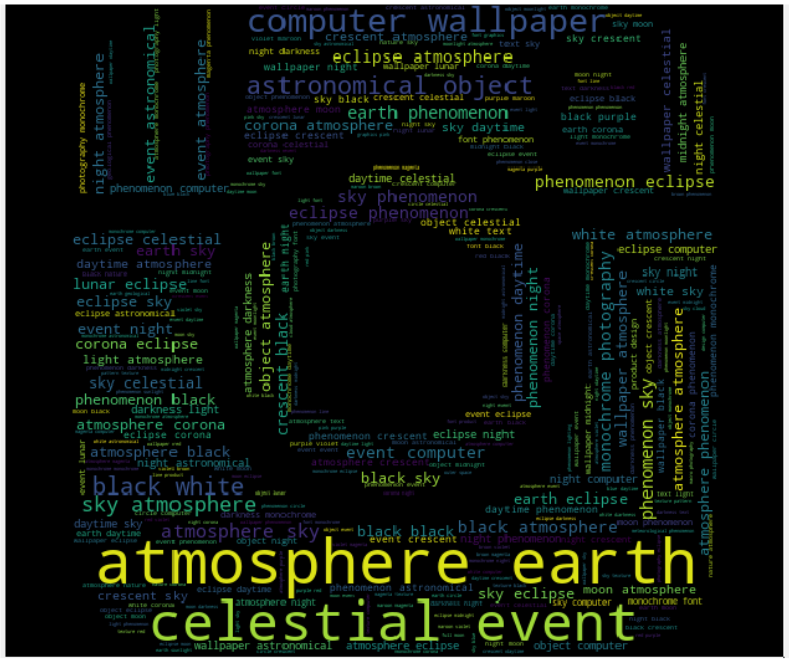
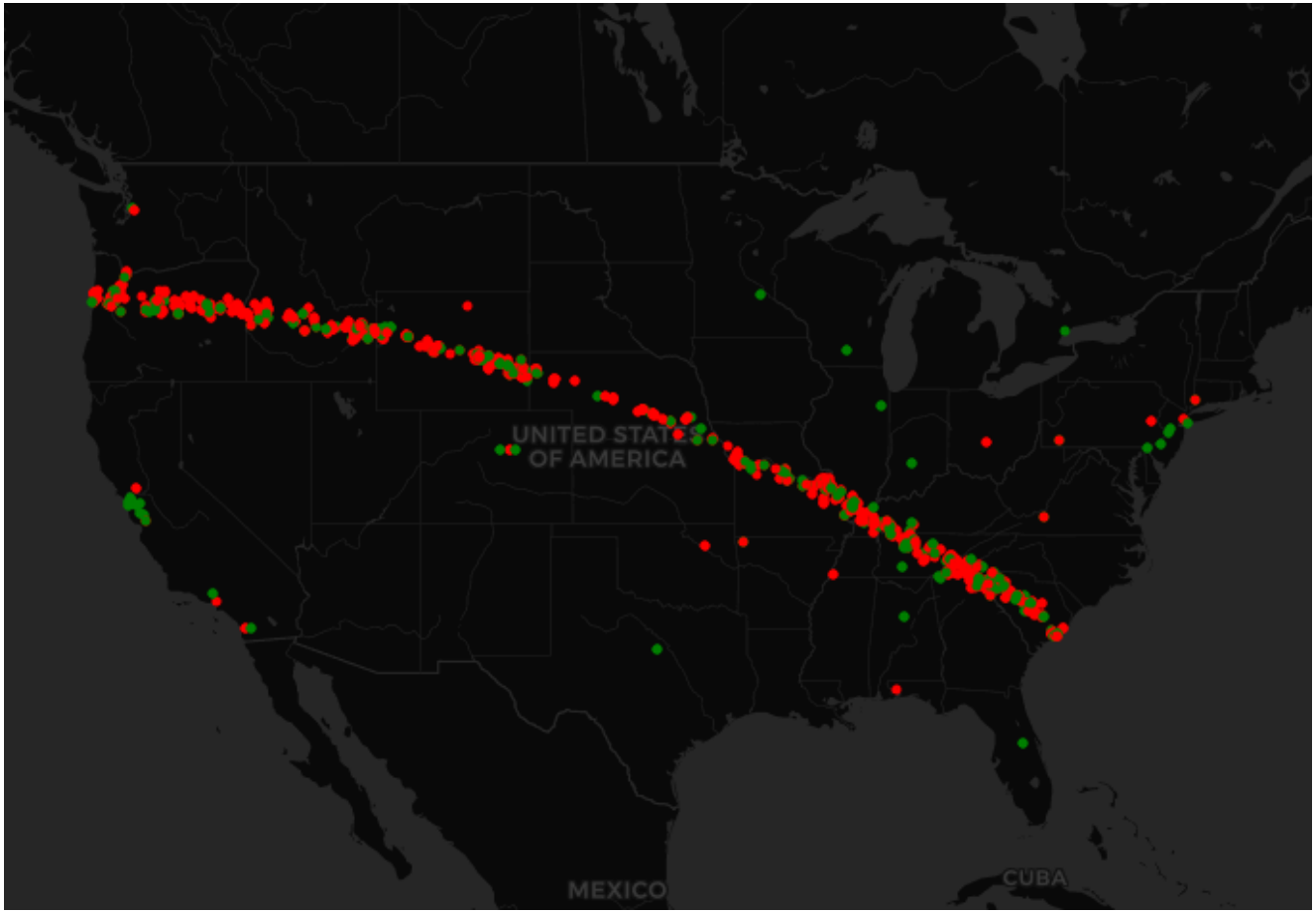
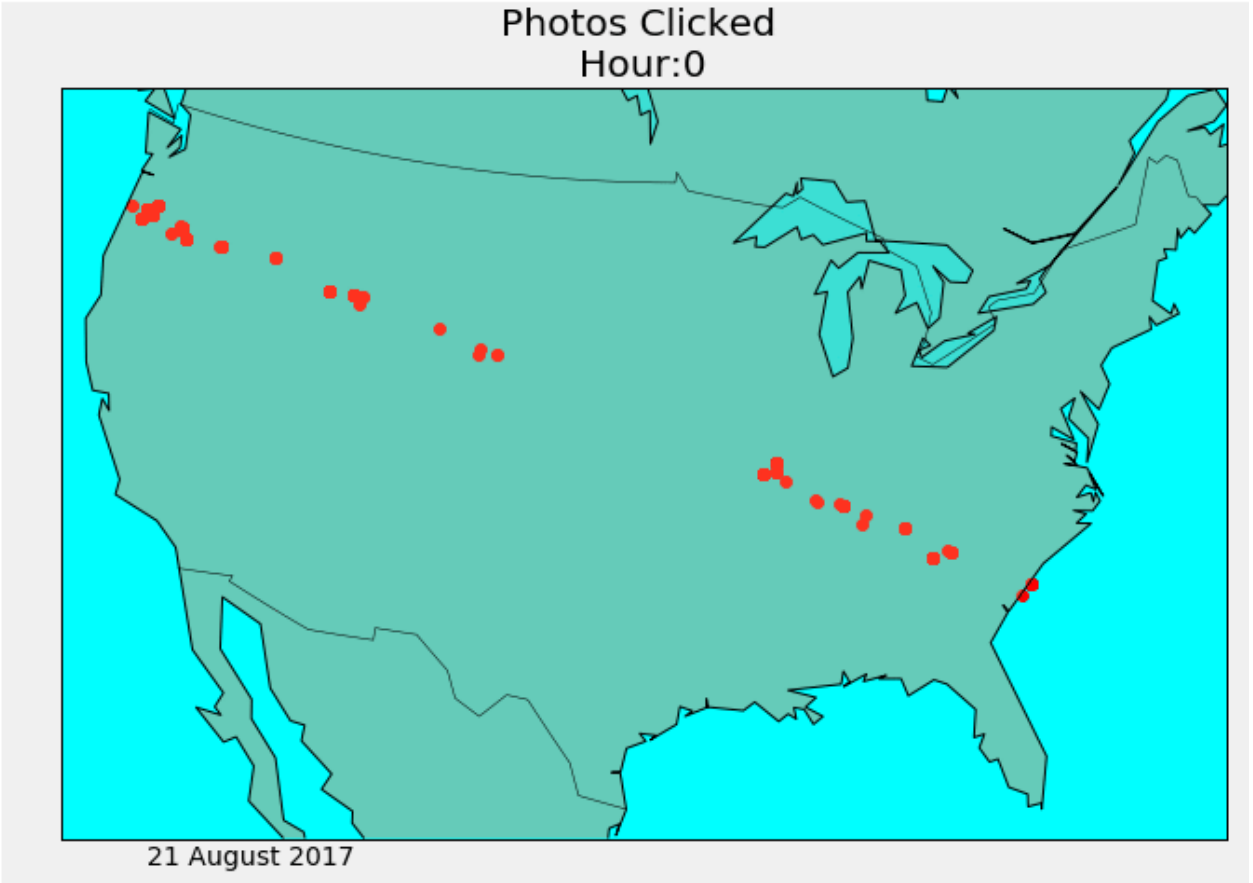
47
42
41
40
40
36
0
20
40
60
80
Count


computer wallpaper
eclipse atmosphere
astronomical object
earth phenomenon
corona atmosphere
phenomenon eclipse
sky phenomenon
eclipse phenomenon
eclipse celestial
lunar eclipse
event night
corona eclipse
light atmosphere
sky celestial
phenomenon black
atmosphere corona
atmosphere black
event computer
black white
sky atmosphere
black sky
earth eclipse
atmosphere sky
black atmosphere
white atmosphere
monochrome photography
atmosphere earth
celestial event

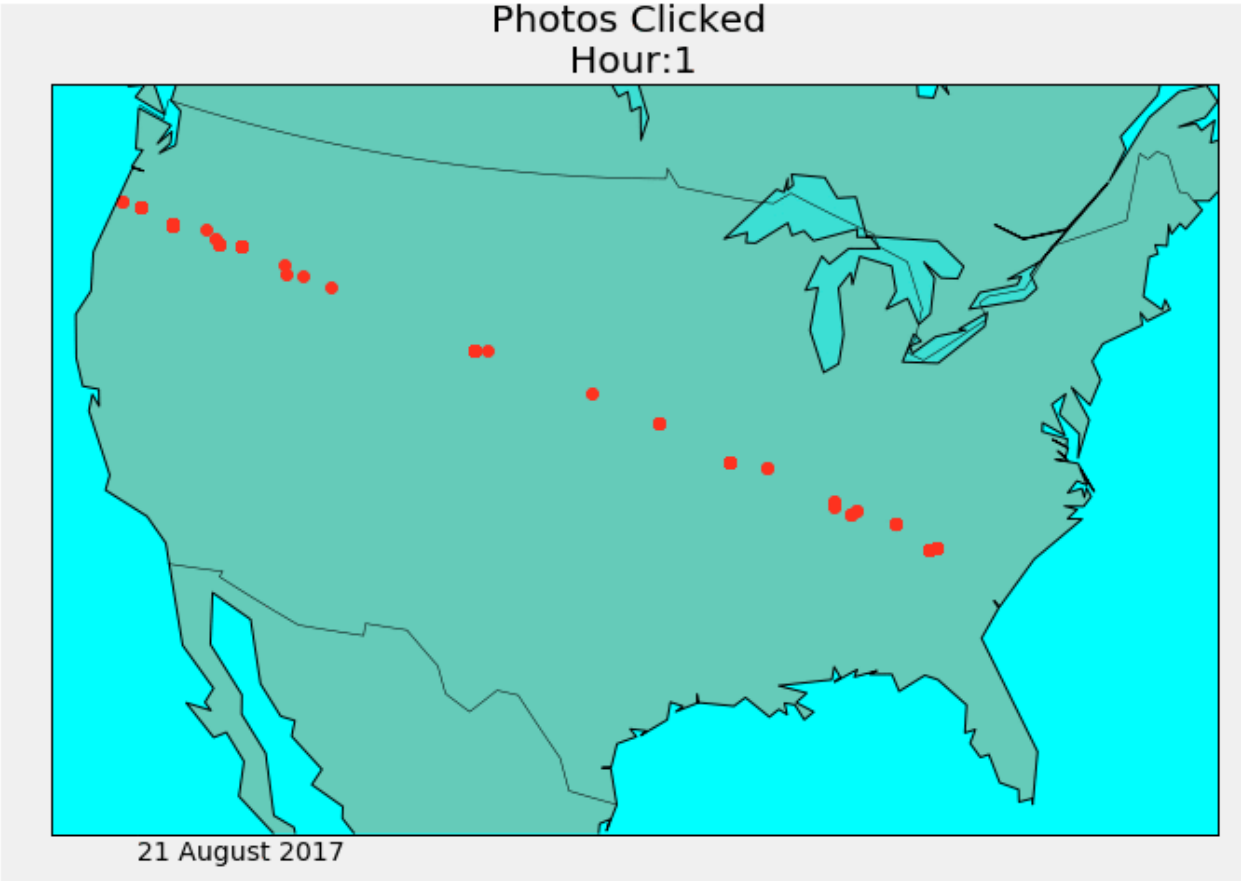
KB –> MB –> GB –> TB –> ?B (3)



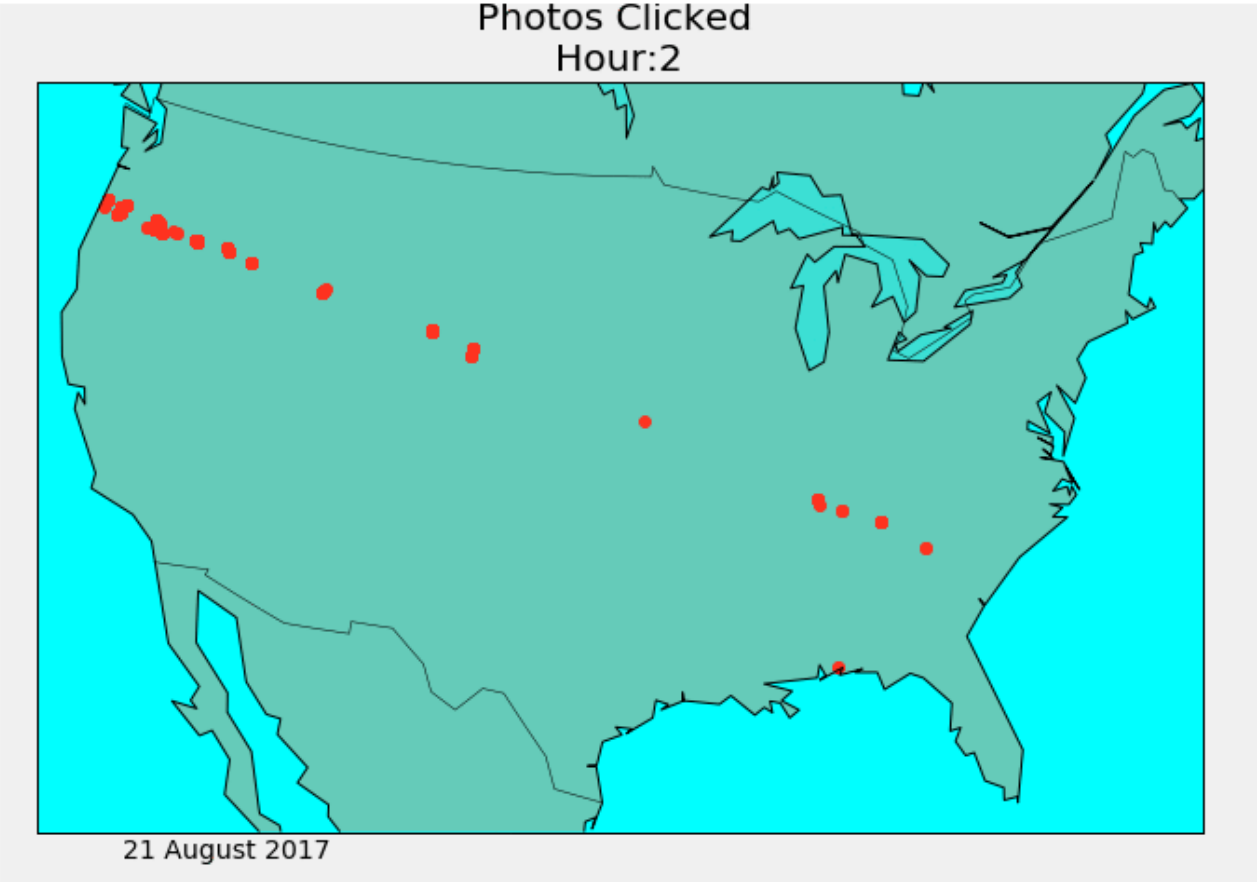
KB –> MB –> GB –> TB –> ?B (4)



KB –> MB –> GB –> TB –> ?B (4)



KB –> MB –> GB –> TB –> ?B (4)



Introduction

KB –> MB –> GB –> TB –> ?B

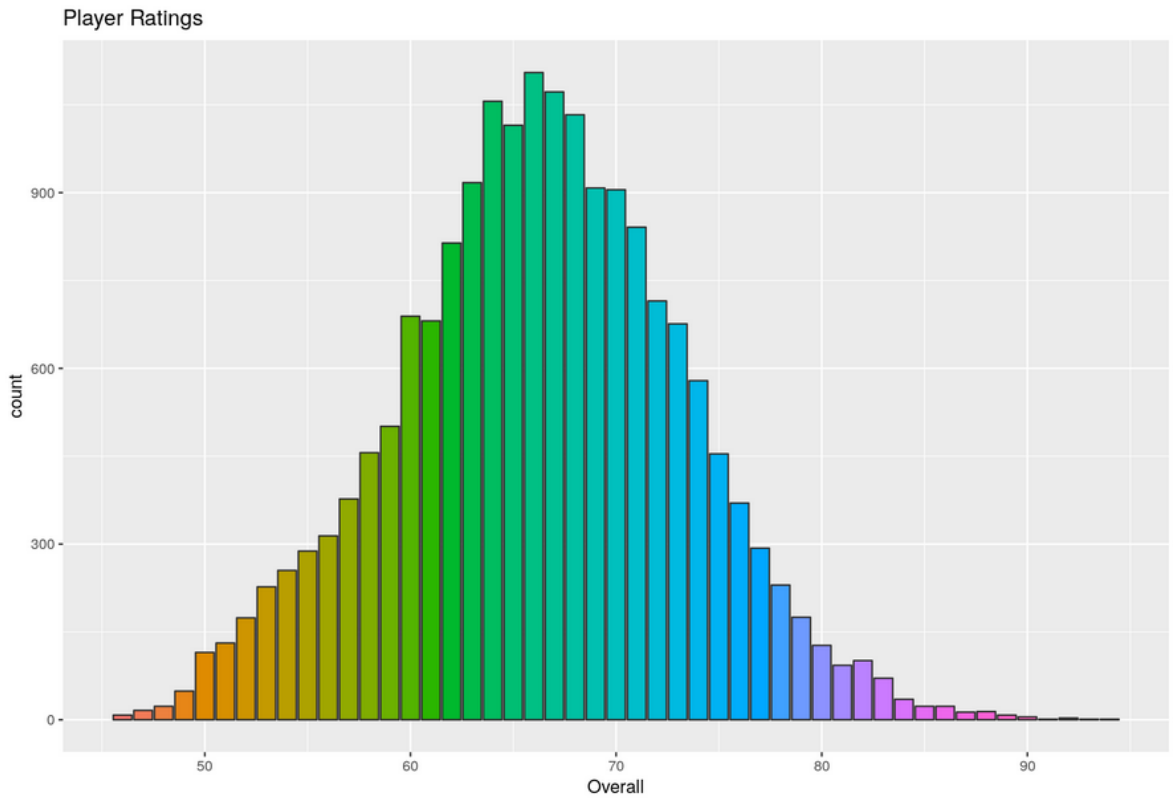
FIFA 18 complete player dataset

Pokemon battles

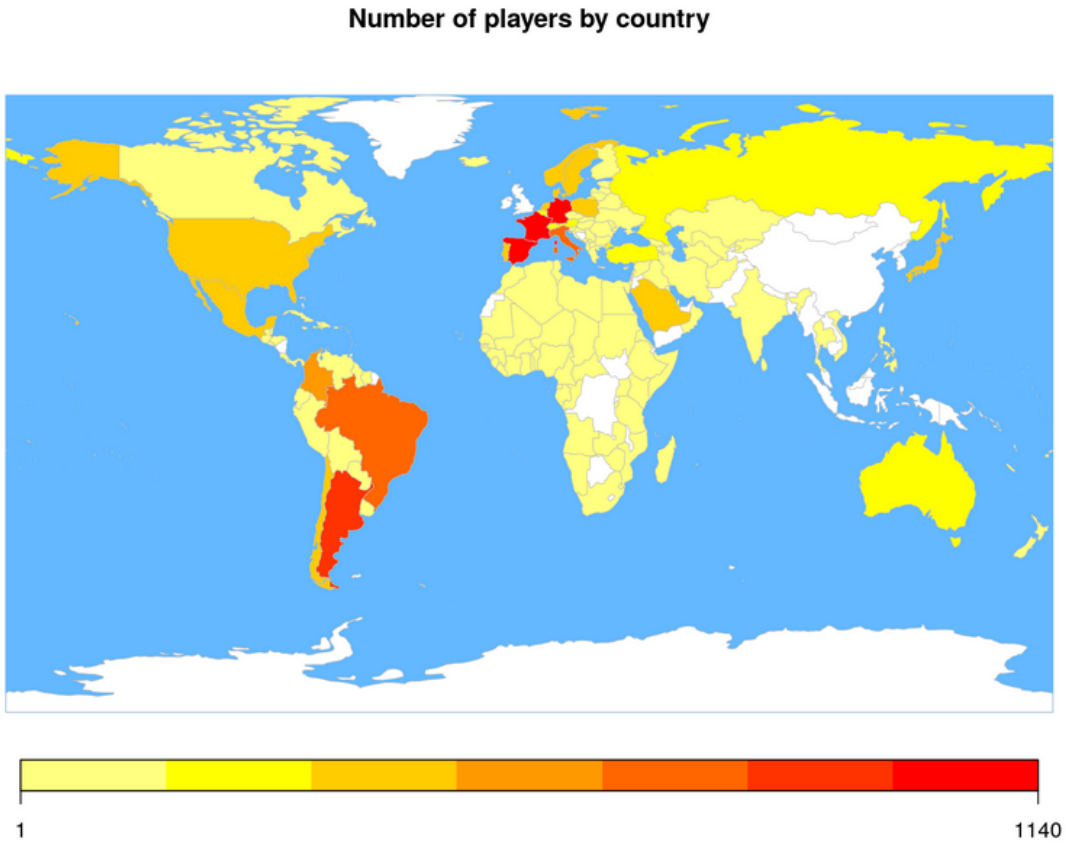
FIFA 18 complete player dataset (1)

Dataset

Statistics about each player in FIFA 18



FIFA 18 complete player dataset (2)



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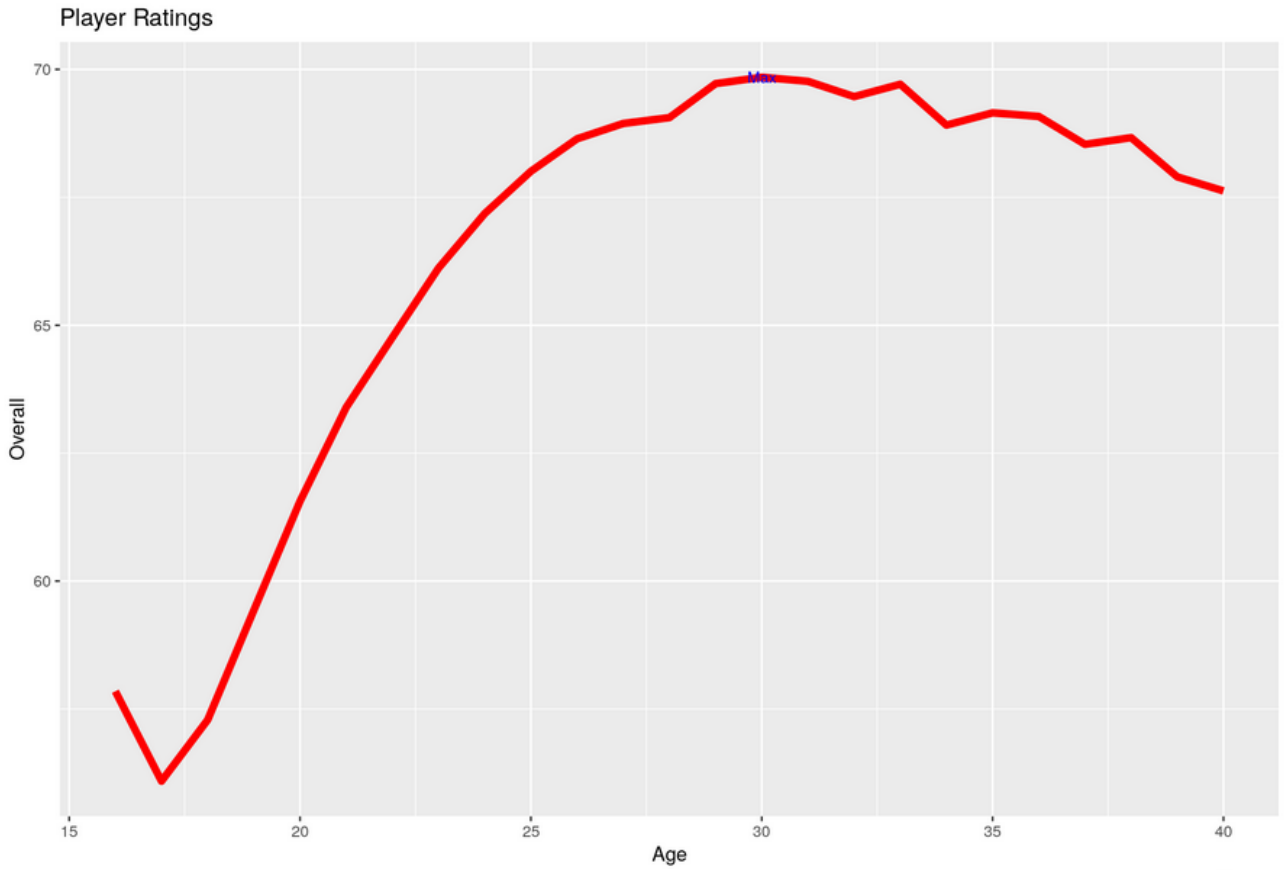
1		England	1630
2		Germany	1140
3		Spain	1019
4		France	978
5		Argentina	965
6		Brazil	812
7		Italy	799
8		Colombia	592
9		Japan	469
10		Netherlands	429

FIFA 18 complete player dataset (3)



Introduction

KB –> MB –> GB –> TB –> ?B

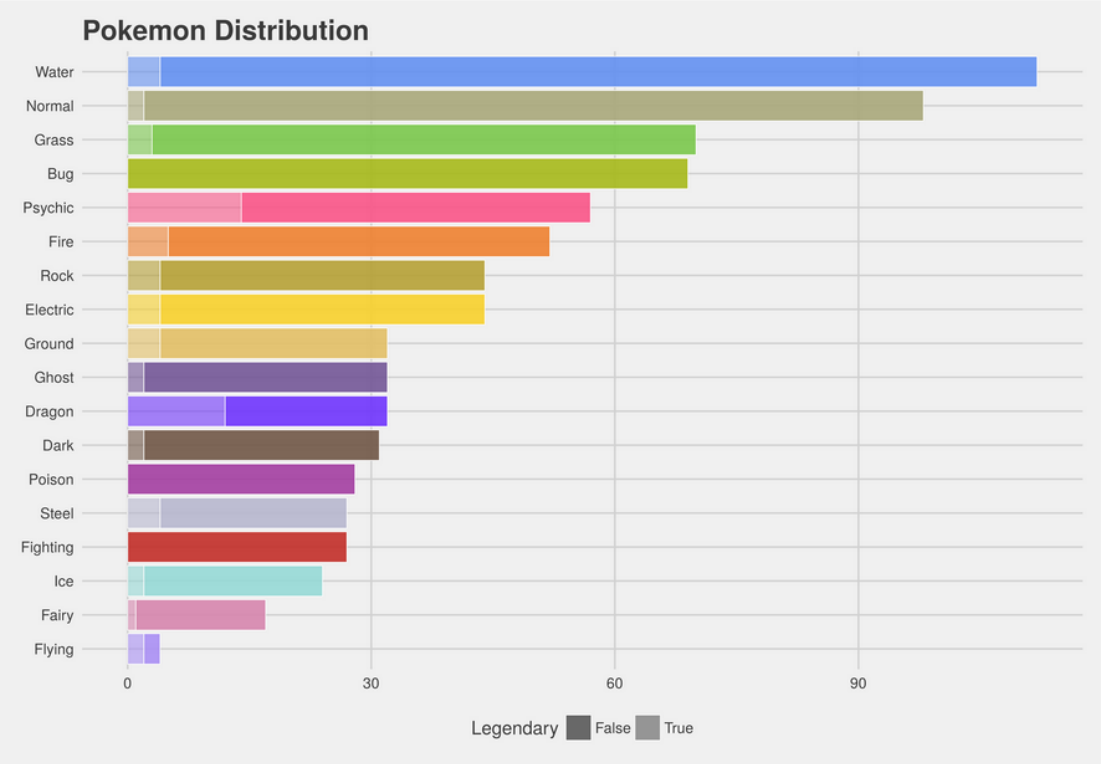
FIFA 18 complete player dataset

Pokemon battles

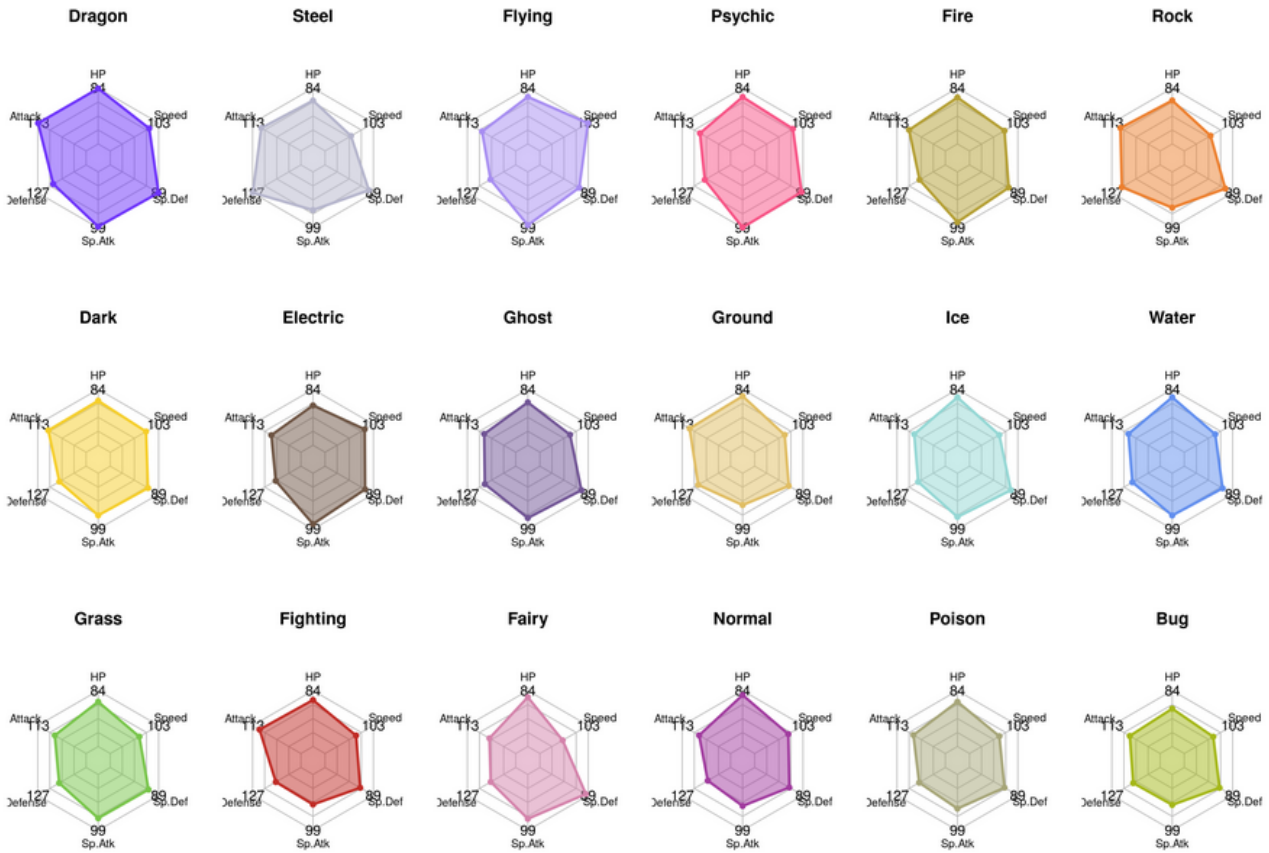
Pokemon battles (1)

Dataset

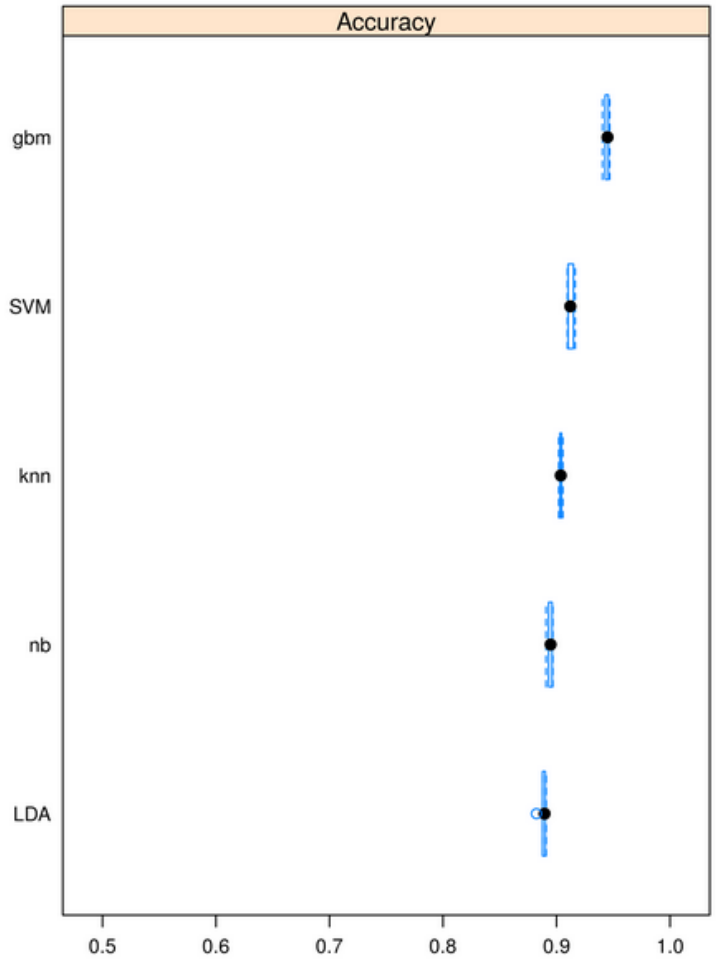
Statistics about each pokemon (type, health points, attack, defense, speed, ...) and a list of combats



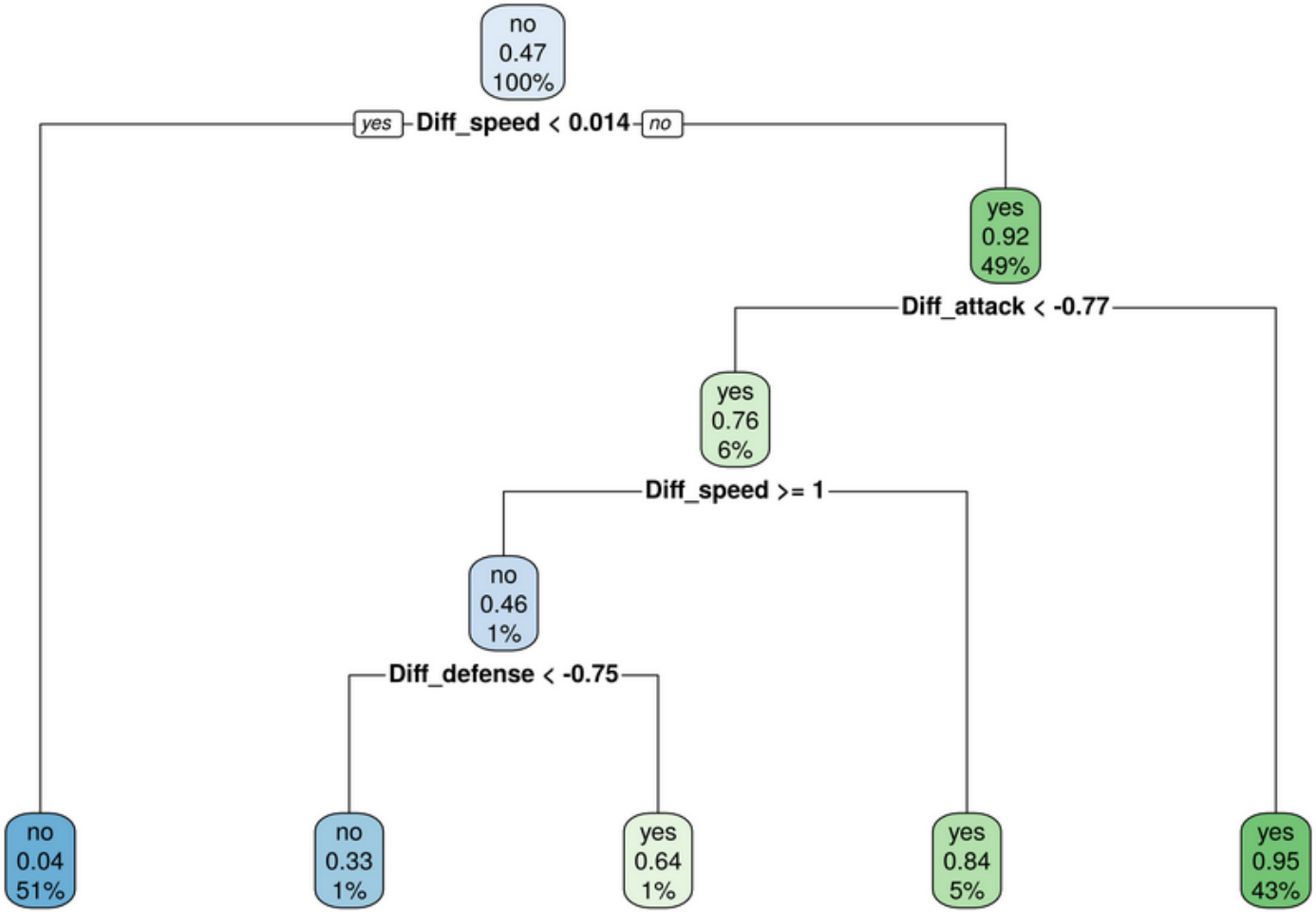
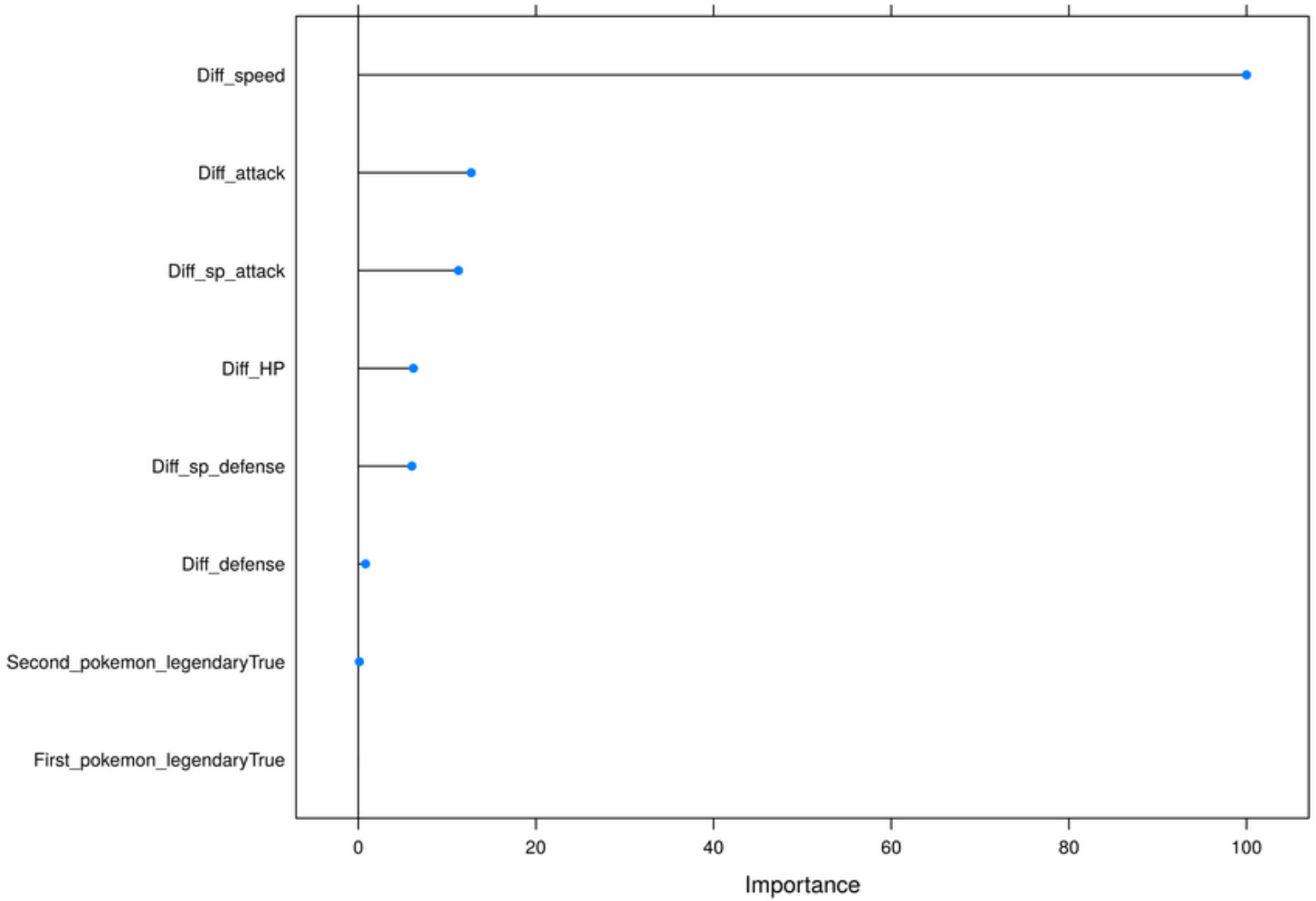
Pokemon battles (2)



Pokemon battles (3)



Pokemon battles (4)



Pokemon battles (4)