

# **FIT3179 Week 10 Homework**

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**DATA VISUALISATION LINK:**

**<https://stuvanfit.github.io/Data-science/>**

**WEEK 10 HW LINK:**

**[https://stuvanfit.github.io/Data-science/VegaLite/Week10\\_DataVisualisation/Week10.html](https://stuvanfit.github.io/Data-science/VegaLite/Week10_DataVisualisation/Week10.html)**

Domain:

- This visualisation explores sports infrastructure and cultural investment in football (or soccer) across different countries.
- This domain focuses on understanding how nations prioritise football as part of their cultural identity by measuring stadium capacity relative to the country's population size.
- This reveals patterns of sports infrastructure development and the cultural significance of football in different regions worldwide.

The Dataset:

- Source: [https://raw.githubusercontent.com/StuvanFIT/Data-science/refs/heads/main/VegaLite/data/stadium\\_capacities.csv](https://raw.githubusercontent.com/StuvanFIT/Data-science/refs/heads/main/VegaLite/data/stadium_capacities.csv)
- Attribute types:
  - Confederation (Nominal): Football/Soccer governing body region (UEFA, CONMEBOL, CONCACAF, CAF, AFC, OFC)
  - Stadium (Nominal): Name of the stadium
  - City (Nominal): City location
  - Capacity (Quantitative): Number of seats in the stadium
  - Country (Nominal): Country name
  - IOC (Nominal): The Country code like AUS etc...
  - Population (Quantitative): Country population
- I created some attributes in transforms:
  - Total\_capacity = sum of all the stadium capacities by country
  - Stadium\_count = number of stadiums per country
  - Seats\_per\_Capita = total capacity / total country population
  - Seats\_per\_1000 = Seats per capita multiplied by 1000 for better readability

Justification:

I chose to use a horizontal bar chart as my idiom.

The main goal was to compare and rank countries by their stadium infrastructure.

Horizontal bars make it easy to see which countries have the highest seats per capita at a glance. Additionally, sorting from highest to lowest, naturally guides the human eyes through the rankings. The magnitude increases from left (origin) to right, which feels intuitive

I initially attempted the Choropleth Map but could not get it to work due to inconsistencies with my data and the natural world map. Also, was difficult to compare small countries.