



Data Visualization Project

Visualizations of taxi rides data
in the city of Porto

Alessandro Pierro
Giulia Marchiori Pietrosanti
Valentina Blasone

22 December 2021

Topic and Dataset

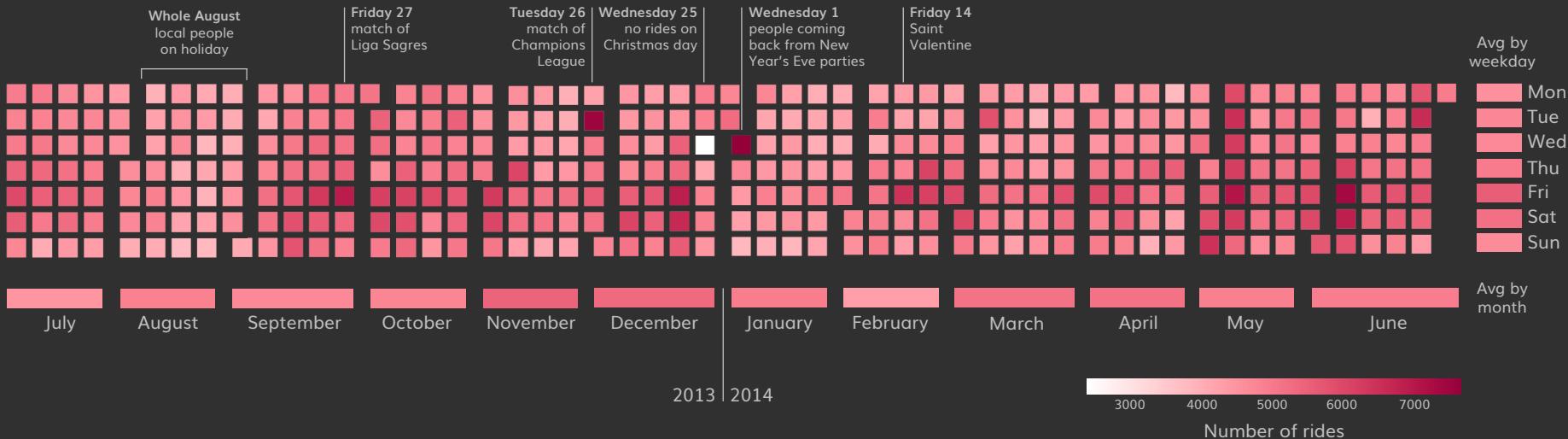
- **Taxi rides** data
- All rides performed by 442 taxis in the **city of Porto** from 01/07/2013 to 30/06/2014
- Used fields: TRIP_ID, TAXI_ID, TIMESTAMP, POLYLINE and derived data
- Available online at <https://www.Kaggle.Com/crailtap/taxi-trajectory>

Addressed Questions

1. How does the daily number of rides change through time?
2. Is there a link between the travel time per km and the daily hour?
3. Given a point of interest, how are the trajectories distributed across the area served by the taxis?

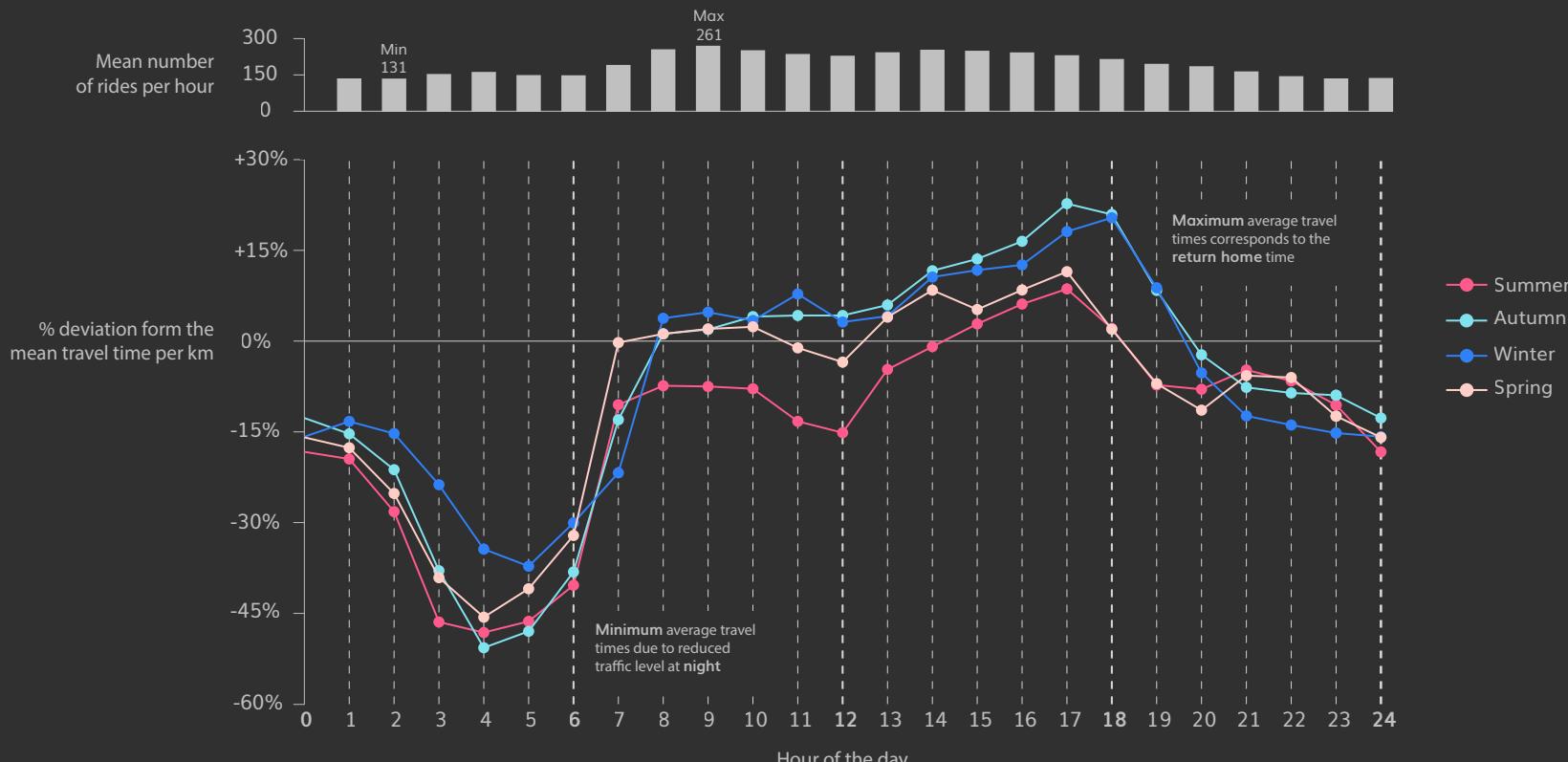
Events and holidays influence the pace for taxi drivers

Number of rides in Porto across the days from July 2013 to June 2014



Viability trend reflects the typical daily routine of the city

The average travel time per km through the day, divided by season, in the city of Porto



Taxi trajectories show concentration in the city center

Interactive map of Porto showing trajectories and starting points for a given destination



Individual Contributions

- **Design** phase: All together
- **Data parsing** and **plot creation** phase:
 1. **Calendar Heatmap**: Alessandro Pierro and Giulia Marchiori Pietrosanti
 2. **Line Plot**: Alessandro Pierro and Giulia Marchiori Pietrosanti
 3. **Interactive Map**: Valentina Blasone
- **Aesthetic refinements** phase: Contributions from all the group members

Thanks for your attention!