# Domain of interest

### Why are you interested in this field/domain?

On September 23rd, 2020. California governor signed a history-making executive order: The state will ban the sales of new gas-powered cars within the next 15 years. Over the last year, the stock price of Tesla, the leading enterprise in the EV(electronic vehicle) field, has increased by 500%. This indicated the public pays more attention to the EV industry field. From the data available, we would like to study what affects the EV sales.

### What other examples of data driven project have you found related to this domain (share **at least 3**)?

Deloitte has a comprehensive analysis on battery electric vehicle that can access via <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/manufacturing/deloitte-uk-battery-electric-vehicles.pdf>

Prediction of Electric Vehicle Penetration from Electric Vehicle Transportation Center

<http://evtc.fsec.ucf.edu/research/project5.html>

Analysis of the Electric Vehicle Industry by International Economic Development Council

<https://www.iedconline.org/clientuploads/Downloads/edrp/IEDC_Electric_Vehicle_Industry.pdf>

### What data-driven questions do you hope to answer about this domain (share **at least 3**)?

Does the petrol price affect EV sales?

Will EV sales keep increasing in the next few year and take place gas cars in the future?

When it comes to each brand who manufacture EV, is range one of the determinants of its sales?

# Finding Data

1. EV sales by model.xlsx

* Where did you download the data (e.g., a web URL)?

<https://afdc.energy.gov/files/u/data/data_source/10567/10567_pev_sales_2-28-20.xlsx>

* How was the data collected or generated? Make sure to explain *who* collected the data (not necessarily the same people that host the data), and who or what the data is about?

Transportation Research Center at Argonne National Laboratory, [anl.gov/es/light-duty-electric-drive-vehicles-monthly-sales-updates](http://anl.gov/es/light-duty-electric-drive-vehicles-monthly-sales-updates). The data is about EV sales for each models.

* How many observations (rows) are in your data?

55

* How many features (columns) are in the data?

10

* What questions (from above) can be answered using the data in this dataset?

Will EV sales keep increasing in the next few year and take place gas cars in the future?

2.Visualizing the Range of EV on Major Highway Routes

* Where did you download the data (e.g., a web URL)?

<https://www.visualcapitalist.com/range-evs-major-highway-routes/>

* How was the data collected or generated? Make sure to explain *who* collected the data (not necessarily the same people that host the data), and who or what the data is about?

The data is from United States Environmental Protection Agency, and it is about the range(miles) for each brand of EV.

* How many observations (rows) are in your data?

26

* How many features (columns) are in the data?

4

* What questions (from above) can be answered using the data in this dataset?

When it comes to each brand who manufacture EV, is range one of the determinant of its sales?

3. U.S. Gasoline Retail Price

* Where did you download the data (e.g., a web URL)?

https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMM\_EPMR\_PTE\_NUS\_DPG&f=M

* How was the data collected or generated? Make sure to explain *who* collected the data (not necessarily the same people that host the data), and who or what the data is about?

The data is from Energy Information Administration

* How many observations (rows) are in your data?

362

* How many features (columns) are in the data?

2

* What questions (from above) can be answered using the data in this dataset?

Does the petrol price affect EV sales?