**Question 15.1**

Describe a situation or problem from your job, everyday life, current events, etc., for which optimization would be appropriate. What data would you need?

Suppose we are running in charge of the Tesla charging system, we need to optimize the distribution of the Tesla Supercharger network, in order to provide better service and cut down total cost. We may need the following data: The number of Tesla vehicles in a certain area, the price of land in this area, the potential locations of the Supercharger, the driving time on each road, and the residential area.