Description and deliverables

This capstone project is an opportunity for you to analyze a dataset and build predictive models that can provide insights to the Human Resources (HR) department of a large consulting firm.

Upon completion, you will have two artifacts that you would be able to present to future employers. One is a brief one-page summary of this project that you would present to external stakeholders as the data professional in Salifort Motors. The other is a complete code notebook provided here. Please consider your prior course work and select one way to achieve this given project question. Either use a regression model or machine learning model to predict whether or not an employee will leave the company. The exemplar following this actiivty shows both approaches, but you only need to do one.

In your deliverables, you will include the model evaluation (and interpretation if applicable), a data visualization(s) of your choice that is directly related to the question you ask, ethical considerations, and the resources you used to troubleshoot and find answers or solutions.

| Variable | Description |
| --- | --- |
| satisfaction\_level | Employee-reported job satisfaction level [0–1] |  |
| last\_evaluation | Score of employee's last performance review [0–1] |  |
| number\_project | Number of projects employee contributes to |  |
| average\_monthly\_hours | Average number of hours employee worked per month |  |
| time\_spend\_company | How long the employee has been with the company (years) |  |
| Work\_accident | Whether or not the employee experienced an accident while at work |  |
| left | Whether or not the employee left the company |  |
| promotion\_last\_5years | Whether or not the employee was promoted in the last 5 years |  |
| Department | The employee's department |  |
| salary | The employee's salary (U.S. dollars) |  |