

workbook

September 13, 2021

```
[2]: %load_ext autoreload
      %autoreload 2
      # https://ipython.org/ipython-doc/3/config/extensions/autoreload.html
```

The autoreload extension is already loaded. To reload it, use:

```
%reload_ext autoreload
```

```
[3]: import sys
      from pathlib import Path

      import matplotlib.pyplot as plt
      plt.rcParams["figure.figsize"] = (16, 8)
```

```
[4]: sys.path
```

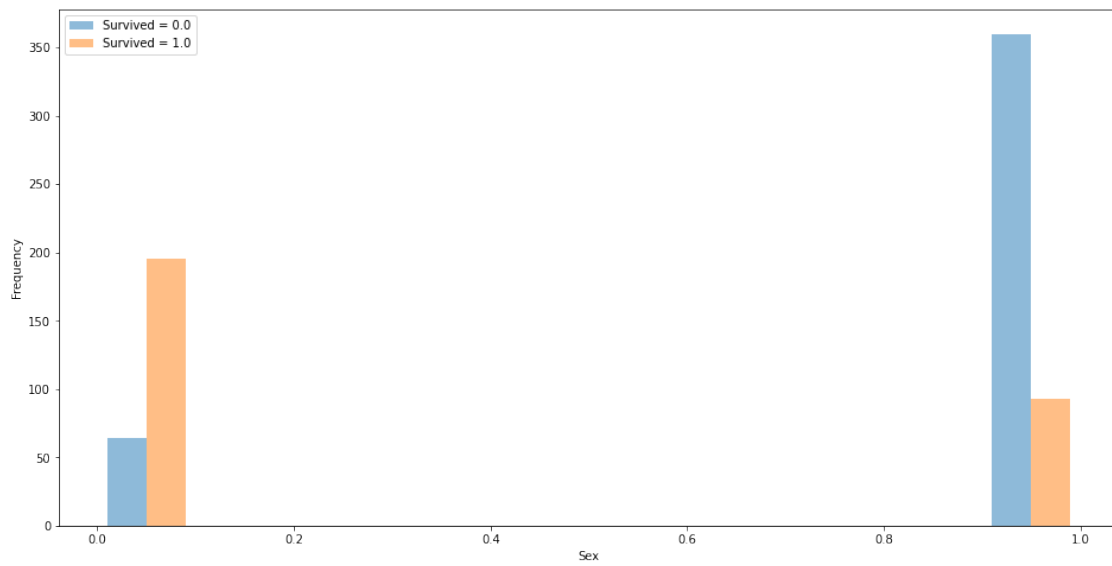
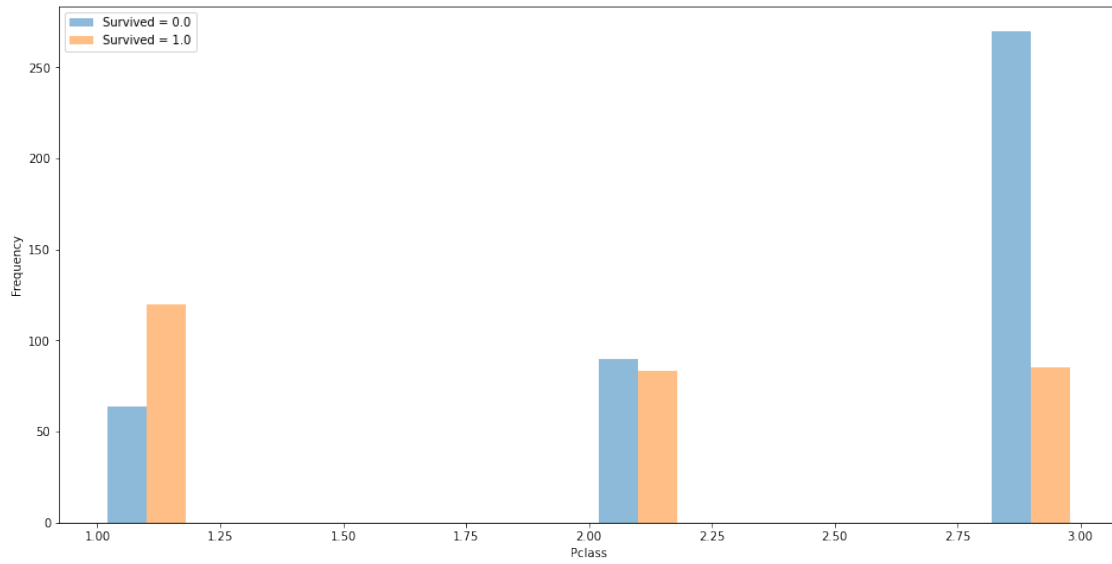
```
[4]: ['/Users/shigo/work/ml-python/ps0-sgowdaks',
      '/Users/shigo/miniconda3/lib/python3.9.zip',
      '/Users/shigo/miniconda3/lib/python3.9',
      '/Users/shigo/miniconda3/lib/python3.9/lib-dynload',
      '',
      '/Users/shigo/miniconda3/lib/python3.9/site-packages',
      '/Users/shigo/miniconda3/lib/python3.9/site-packages/IPython/extensions',
      '/Users/shigo/.ipython']
```

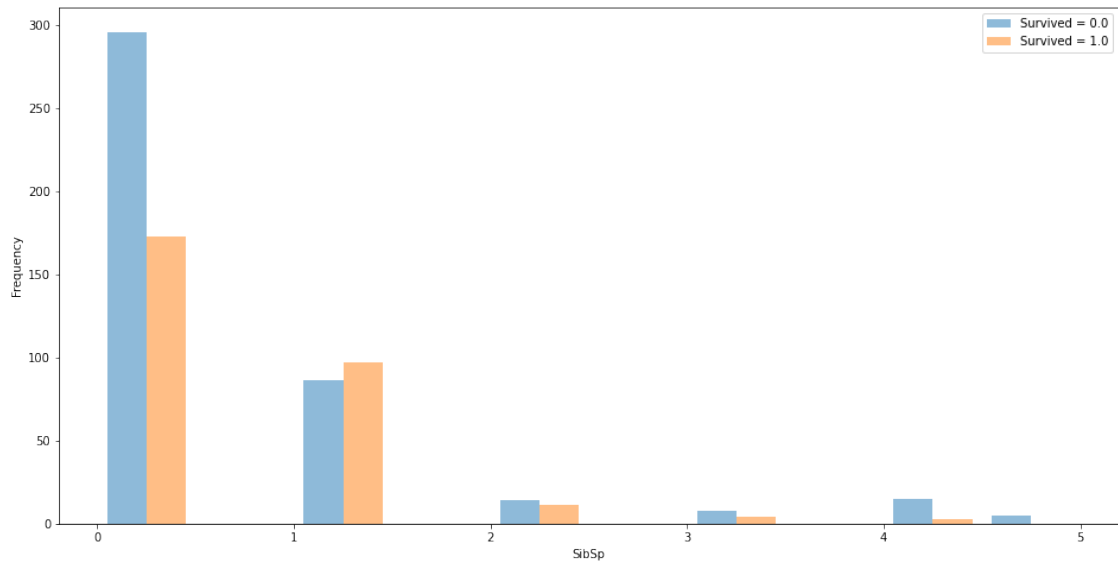
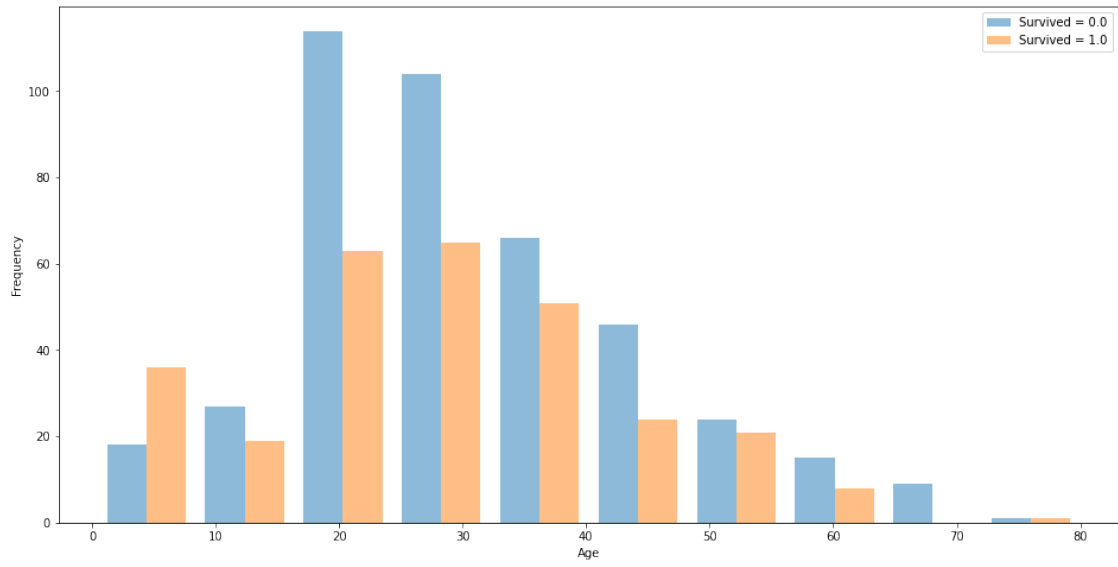
```
[5]: if 'source' not in sys.path:
      sys.path.append('source')
```

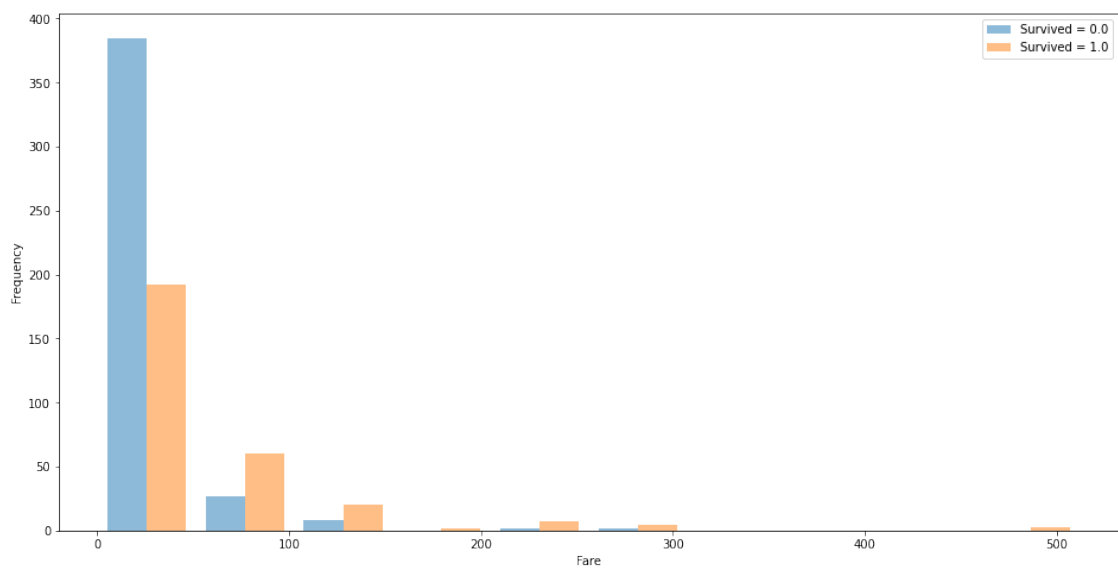
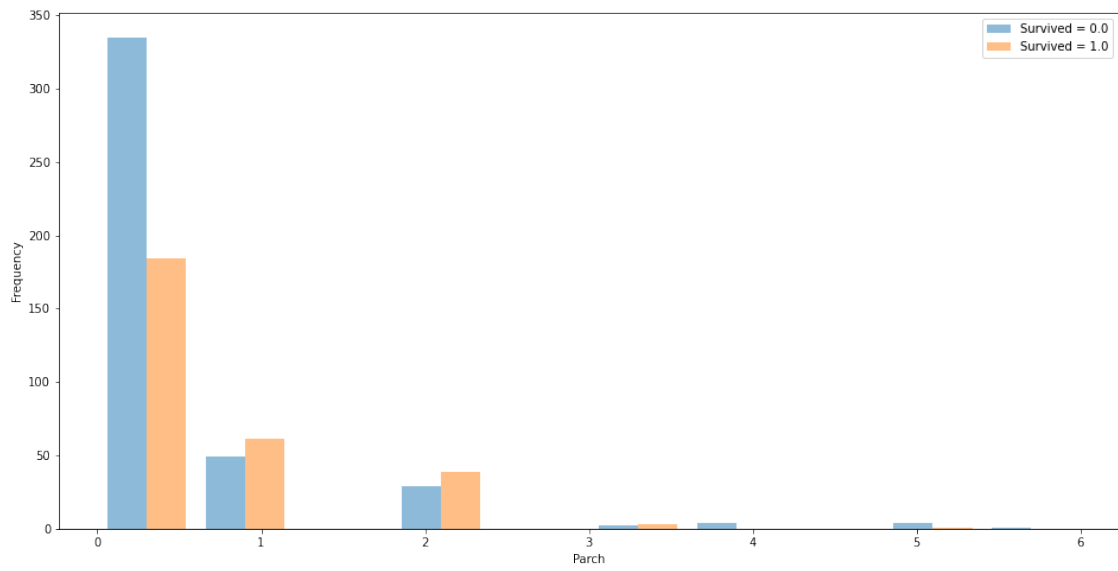
```
[8]: import titanic
```

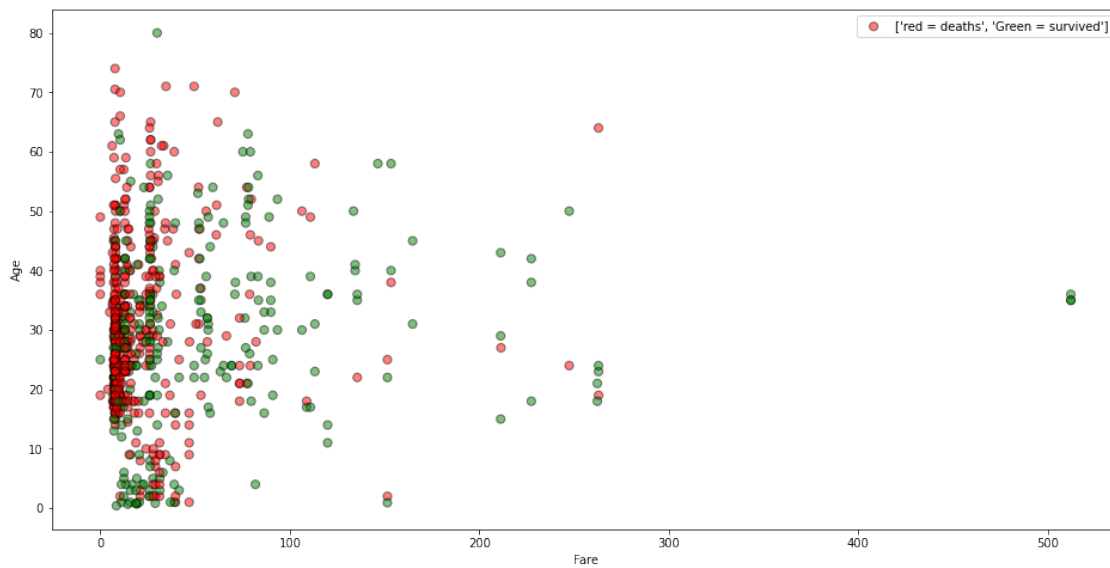
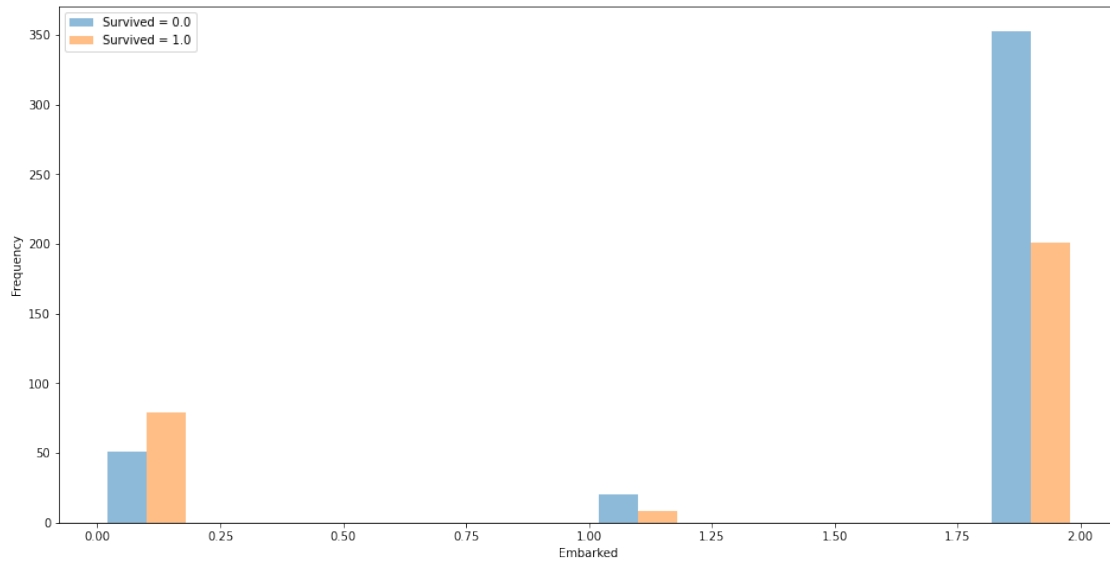
```
[21]: from titanic import main
      main()
```

Plotting...









Classifying using Majority Vote...

-- training error: 0.404

Classifying using Random...

-- training error: 0.485

Done

Visualization Frequency vs Pclass: The graphs indicates the number of people survived in Pclass 1 is comparatively higher than that of the other classes, and number os deaths is higher in Pclass 3 while compared to others.

Frequency vs sex: The graph indicates that the number of females survivors are more than male

survivor.

Frequency vs Age: The graph indicates that the number of people survived are more in the range of 20 to 30 age group.

Frequency vs sibsp: The graph indicates that the number of people who had zero siblings and no spouses survival rate is comparatively higher.

Frequency vs parch: The graph indicates that the number of people who were not parents and childrens survival rate was comparatively higher.

Frequency vs Fare: The graph indicates that the large number of people fall under the group of less fare(<100), and the survival rate here is comparatively high.

Age vs Fare: In the above Histogram, Green color represents the number of people survived and red color indicates no of people who could not survive. we can observe that number of people that survived mostly are from the fare range of (0,100) and the age is distributed 15 to 45 years.