Final Report - Titanic: Machine Learning from Disaster

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Introduction and Research Problem

All details for this project will be provided by a competition titled "Titanic - Machine Learning from Disaster" introduced by kaggle.com (**titanic**).

Introduction

This project will build a predictive model that aims to find the type of people who are going to survive the sinking of the Titanic, a well renowned ship that was believed to be "unsinkable" until it hit an iceberg in 1912, resulting in the death of 1502 passengers/crew.

This project will utilize passenger information, such as name, age, gender, socio-economic class, etc., to determine what sorts of groups were more likely to survive than others during the sinking of the Titanic.

Research Problem

What motivated this group to take on the challenge of creating a predictive model that will dictate the type of individuals that were the most likely to survive the sinking of the Titanic is that this project provided an adequate challenge from a machine learning perspective.

To give more detail, this project will provide a lot of testing data in order to make predictions on who will survive. In consequence of this data, this team will be able to create a predictive machine learning model that utilizes the data provided for this project to make predictions on who will survive. Moreover, this project will enable the team to practice the machine learning concepts previously learned in order to find a solution for this problem.

In addition, another motivation that this team had for undertaking this specific project is that this project requires the primary use of the "numpy" and "pandas" python packages in order to find a solution. As a result, this project will enable this team to become more skillful in using these packages to manipulate data and apply machine learning concepts.

Related Work

Methodology and Technical Details

Methodology

Technical Details

Experimental Results and Analysis

Experimental Results

Analysis

Conclusion and Future Work

Conclusion

Future Work

Contributions

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