Supervised Learning

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1 Introduction

In this article, I will present the results of various Supervised Learning methods applied on two classification problems. Those methods will be:

- Decision Trees with some form of pruning
- Neural Networks
- Boosting
- Support Vector Machines
- K-Nearest Neighbors

For each of them, I will discuss the results obtained, the pros and cons, and the parameters that were used. I will also discuss the results obtained when applying the methods on the two datasets. At the end I will also compare the methods between them and highlight the best one for each dataset.

2 Datasets

In this article, I will use two datasets :

- Credit Card Fraud
- Starcreft II

2.1 Credit Card Fraud

This dataset is a credit card fraud detection dataset. It contains a set of credit card transactions that were made by a customer. The dataset contains the following fields: