Credit Card Fraud Detection using Machine Learning and Neural Networks

**Abstract – *With the rise of online payment credit cards have had a huge rule in our daily life and economy for the past two decades and it is important task for companies to identify fraud and non-fraud transactions. Multiple methods have been suggested for this problem and they each have their own pros and drawbacks. In this paper we will apply machine learning algorithms and artificial neural networks on the real-world dataset that is taken from Kaggle [1]. Our main goal is to detect all fraud cases. Moreover, we will compare the results of different linear, ensemble, voting and other methods from open-source libraries as well as with methods done in previous papers in this field.***

**Keywords** *Credit Card Fraud, Supervised Machine Learning, Artificial Neural Networks, Imbalanced classification.*

**Introduction**