**Project Proposal**

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The problem to solve is to be able to detect fraudulent credit card transactions so that the customers of credit card companies are not charged for items that they did not purchase. I’ll be using the kaggle credit card fraud detection dateset from this link, <https://www.kaggle.com/datasets/mlg-ulb/creditcardfraud>.

**Main challenges:**

1. Enormous Data is processed every day and the model build must be fast enough to respond to the scam in time.
2. Majority of the transactions are not fraudulent so there is an imbalance in the data making it hard to detect fraudulent transactions.
3. Most peoples personal data is private so data availability is an issue.
4. Misclassified Data can be another major issue, as not every fraudulent transaction is caught and reported.

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1. Naive Bayes
2. Decision Tree
3. Neural Network
4. Linear Regression
5. Logistic Regression