

Greetings,

I would like my capstone two project to be on Predicting Credit Card Approval Using Machine Learning. This project's scope is to better filter/screen applicants for a credit card and reduces the number of delinquent debts from approved applicants. There is a current screening process; however, applicants can slip through the system by meeting specific criteria. The aim is to identify two to three factors affecting applicant status. We will do this by building a automatic credit card approval predictor using machine learning techniques.

- **Problem statement:** Identify two to three factors affecting applicant status in the finance industry for credit card approval in 4 - 6 weeks.
- **Context:** Banks receive a lot of applications for the issuance of credit cards. Many were rejected for high-loan balances, low-income levels, or too many inquiries on an individual's credit report. Manually analyzing these applications is error-prone and a time-consuming process. This task can be automated with machine learning, and almost every bank does so nowadays.
- **Criteria for Success:** Being able to identify at least two or three factors that would determine whether a client should be issued a credit card or not.
- **Scope of Solution Space:** The bank or financial institution issuing the credit card will be able to deploy the model to determine which clients should be approved for the credit card and reduces the number of delinquent debts from approved applicants
- **Constraints:** Applicants may slip through the system by meeting specific criteria.
- **Stakeholders:** Anyone in the finance industry who evaluates whether a customer would be a good client for the credit card.
- **Data Source:** There are two sources of data for credit card approval:
  - [UCI Machine Learning Repository: Credit Approval Data Set](#)
  - [Credit Card Approval Prediction | Kaggle](#)

**Presentation:** In terms of deliverables, this project will contain GitHub repo containing the work we complete for each step of the project:

- A Slide deck
- A project report.