#### Karina Serikova

Last three weeks I've been learning what credit risks are, what scoring is, what it is used for and how it is executed. Also I had conversations with actual bank analytics who build the real scoring models and asked them some questions which would be useful for this diploma project. I understood what machine learning algorithms used in real practice in big banks of Kazakhstan for evaluation of credit risks. I decided to use logistic regression (it is a bit old method of evaluation of credit risks but I'm too curious) and XGBoost Classifier (this one is more precise but not interpreted). So I wont to compare these two and see which one is better. Now I plan to study these two more in details. First I will start with logistic regression.

## Syzdykbayev Makhmut

I'm learning a book about credit scores , watched a video on youtube , recompile old project about predicting credit loan , sometimes check slack channels about bl (it's app)

Check ieee papers, knowledge gap about algorithms

Links

https://www.scribbr.com/dissertation/literature-review/ https://ieeexplore.ieee.org/Xplore/home.jsp https://towardsdatascience.com/my-analysis-from-50-papers-on-the-application-of-ml- in-credit-lending-b9b810a3f38

http://shop.oreilly.com/product/0636920043836.do http://shop.oreilly.com/product/0636920023784.do https://www.youtube.com/watch?v=JUHdAXGpu44

### **Rysbek Beibarys**

Our diploma work about machine learning algorithms to evaluate credit risks.

Due to this time, I was learning models of score boards from banking system. I was looked for How Bank applications look and what kind of style are required. As a Frontend developer of team, my main aim to examine what kind of dates and information (parameters) are necessary to build score board of a client. After the determining of how many parameters and what kind of parameters chosen, I would draw demo version of system (design).

# Zhansaya Alpyspay

#### 1. Studied what the risks are.

There are several types of bank risks. I've studied about the credit risks as our scoring model is about the credits. So, in general, credit risk is the risk that arises

from the possibility of non-payment of loans by the borrowers. This is caused by the borrower becoming insolvent. This is where our scoring model becomes useful, because, such risk can be avoided if the bank provides a credit only to individuals and businesses that are not likely to run out of income over the period of the loan.

2. Considered different formats of forecast models. Identified the advantages of score card.

Despite the fact that forecast models can be developed in other formats, for example, in SAS-code or C-code, the most common is the scoring card format. So there are several reasons why:

- This format is easily interpreted and is attractive to a wide range of risk managers and analysts who do not have in-depth knowledge in the field of statistics and data mining.
- The reasons for failures, low or high scores can be explained to users, auditors, supervisory authorities, top managers and other personnel in a clear business form.
- The process of developing scoring card is understood by a wide audience. Therefore, it meets the requirement of regulatory authorities on the transparency of the method.
- It is very convenient to diagnose and monitor scoring cards using standard reports. The structure of the scoring card allows analysts to perform these operations without deep knowledge in statistics and programming. Therefore, scoring card is becoming an effective risk management tool.

We will try to realize different algorithms of forecasting and then we will choose the best one referring to the accuracy of that model.

- 3. Determined the parameters to create a database for development of the model.
- Customer / ID
- Date of applying / receiving a loan
- Claims Debt / Payout History
- Borrower Application Indicator Approve / Deny
- Product / sales channel and other segment identifiers
- The current status of the client (for example, there are no operations on the account, the account is closed, credit card loss, credit card theft, fraud)