PROJECT PROPOSALS

Project Title	Bank Deposit	Project Date	March, 21st
Team Name	Space		
Team Members	Wenliang Hu, Zixun Zhang, Miaomiao Zhao		
Dataset	Bank Marketing Data Set		

I. Project Description

In general, bank tries to search the client who will deposit more money in the next terms and get the profits from it. Therefore, for the bank, they could balance the deposit and loan by predicting the potential clients and invest more in the clients. For the client, they can make a better investment plan or project. The reason that we choose this topic is this is closer to our lives, and make us know more knowledge of investment management.

II. Project Goals

Our goal is help bank to predict the deposit behavior of the client, according to the predicting, they can make the appropriate investment and financing plan and manage fund flow. We can use bank client data, related to the last contact of the current campaign, and some social and economic context to build a model and analyze the next financing behavior of the clients.

III. Data Set

Here is the web link of the dataset:
http://archive.ics.uci.edu/ml/datasets/Bank+Marketing

The data is related with direct marketing campaigns of a Portuguese banking institution. The marketing campaigns were based on phone calls. Often, more than one contact with the same client was required, in order to access if the product (bank term deposit) were (or not) subscribed. The bank direct marketing data set contains 45211 number of samples with 17 attributes without missing values.

IV. Tools/Package

Specific tools: Python / R

The packages that we plan to use: numpy, pandas, StandardScalar, train_test_split, DecisionTreeClassifier, accuracy_score, preprocessing, etc.

V. Attachments

[1] Hany A. Elsalamony (2014, January). Bank Direct Marketing Analysis of Data Mining Techniques. Retrieved http://research.ijcaonline.org/volume85/number7/pxc3893218.pdf

[2] Sergio Moro and Paul M. S. Laureano, Using Data Mining for Bank direct marketing: an application of the CRISP-DM methodology. Retrieved https://pdfs.semanticscholar.org/a175/aeb08734fd669beaffd3d185a424a6f03b84.pdf

[3] A. Floares., A. Brilutiu. "Decision Tree Models for Developing Molecular Classifiers for Cancer Diagnosis". WCCI 2012 IEEE World Congress On Computational Intelligence June,10-15, 2012-Bresbance, Australia.

[4] Guoxun Wang, Liang Liu(2010). Predicting Credit Card Holder Churn in Banks of China Using Data Mining and MCDM. Retrieved http://ieeexplore.ieee.org/document/5615798/