Project Abstract – CKME136

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Problem

Credit card users can sometimes default on payments. In order to reduce the risk of defaults, banks and credit institutions use credit-risk evaluation to determine which clients will default; so they can limit their credit limits accordingly to minimize financial loss.

Approach and Data

I propose to utilize a neural network classifier to predict which credit card users will default on their payments in the next month. The data is provided by I-Cheng Yeh of Chung Hua University and Che-hui Lien of Tamkang University in Taiwan. Which can be found here: <http://archive.ics.uci.edu/ml/datasets/default+of+credit+card+clients>

Methodology

First, I will separate the data into training and testing sets (either 70/30 or 60/40).

I will train the neural network classifier model with training set.

I will then use the testing set to test the predictive capability of the model and report on the accuracy.

I will utilize R to build the neural network classifier model.