

# Data Analysis for Prosper Loan Data

## 1. Introduction

Prosper is a marketplace lending company that provides unsecured personal loans for any purpose. This dataset, includes 61 columns and 113937 rows, provides valuable information about loan listings and related variables including borrower as well as lender information. In this analysis, we are interested in focusing on variable Borrower's Annual Percentage Rate (APR) for the loan - will be referred as APR in the rest of this notebook, and the factors that have an impact on borrower's APR.

## 2. Key Findings

The borrowers with the following characteristics tend to receive a lower APR:

- a high prosper score
- working as a computer programmer or analyst
- high income
- is a home owner
- a high loan original amount
- a large amount of open credit lines

When predicting what APR a borrow will receive, one can look into the estimated loss associated with the borrower, one important indication of estimated loss is borrower's prosper score.