

STAT3622 Homework 2: Visualizing Lending Club Data by Dynamic Bubble Charts

Date: November 16, 2018

Submit in HTML format through Moodle on or before December 7, 2018. You also need to supplement the codes for reproducing your results for grading purpose.

Review the fascinating TED talk by Professor Hans Rosling in TED website or YouTube. He and his team at Gapminder developed the famous bubble charts in motion to visualize the global GDP and population statistics over the years.



In this homework, we continue playing with the real data from [www.lendingclub.com], by using the same sample as in Homework 1. Refer to [Homework 1] about the data description. You are required to visualize the relationship between the acceptance ratio and the averaged risk score, as grouped by (State, Purpose, Month), where Month can be extracted from the Date variable. Draw the dynamic bubble charts over Month, with “color” presenting Purpose and “size” representing the total number of applications per group, based on the following three approaches.

- A. (30%) Use R:Magick;
- B. (20%) Use R:plotly;
- C. (30%) Use R:shiny; and
- D. (20%) Compare the three different methods in terms of their properties.