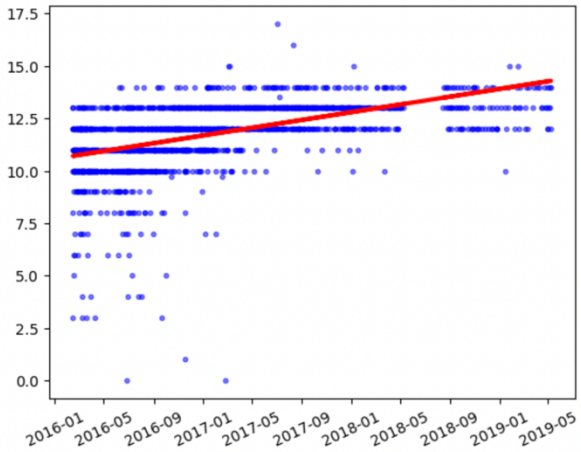
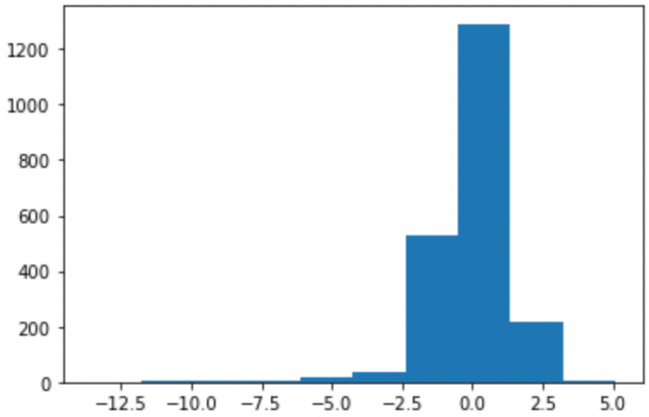
Pup Inflation

The question that I'm interested about is that has there been grade inflation on the @dog_rates Twitter, which rates the cuteness of users' dog pictures.



After cleaning the raw data set, I plot a graph base on the rating score and the time. Each blue point represents one of the ratings. The red line represents the linear regression between score and time. It's easily to find out that the score increasing as the time increasing. It may indicate there is a grade inflation.



However, the second indicate there is no grade inflation. This is a histogram plot of the residuals, which is observed values minus predicted values. The shape of the histogram is normal distribution. Also, the p-value of the red regression line is 2.536058725135737e-127, which mean we could reject that the slope is not different from zero.