

Econ 294 Assignment 5

Curtis Kephart

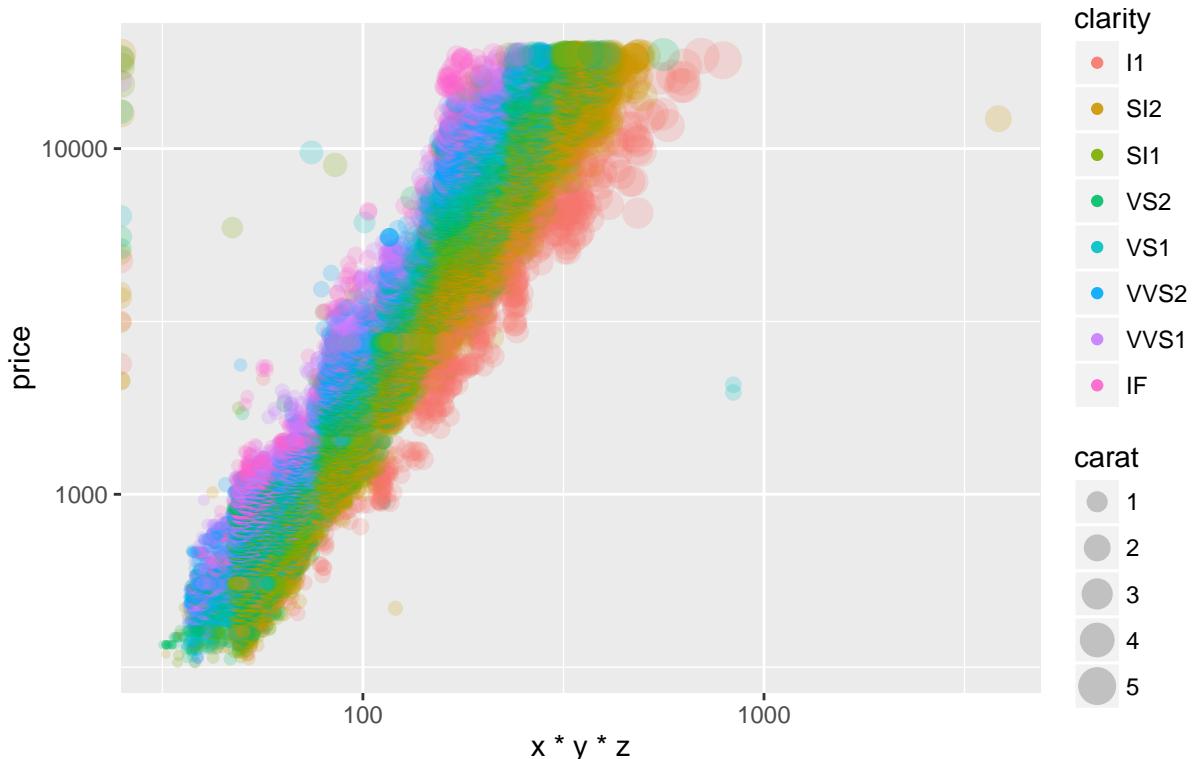
Winter 2016

This assignment is designed to get you to explore `ggplot2`.

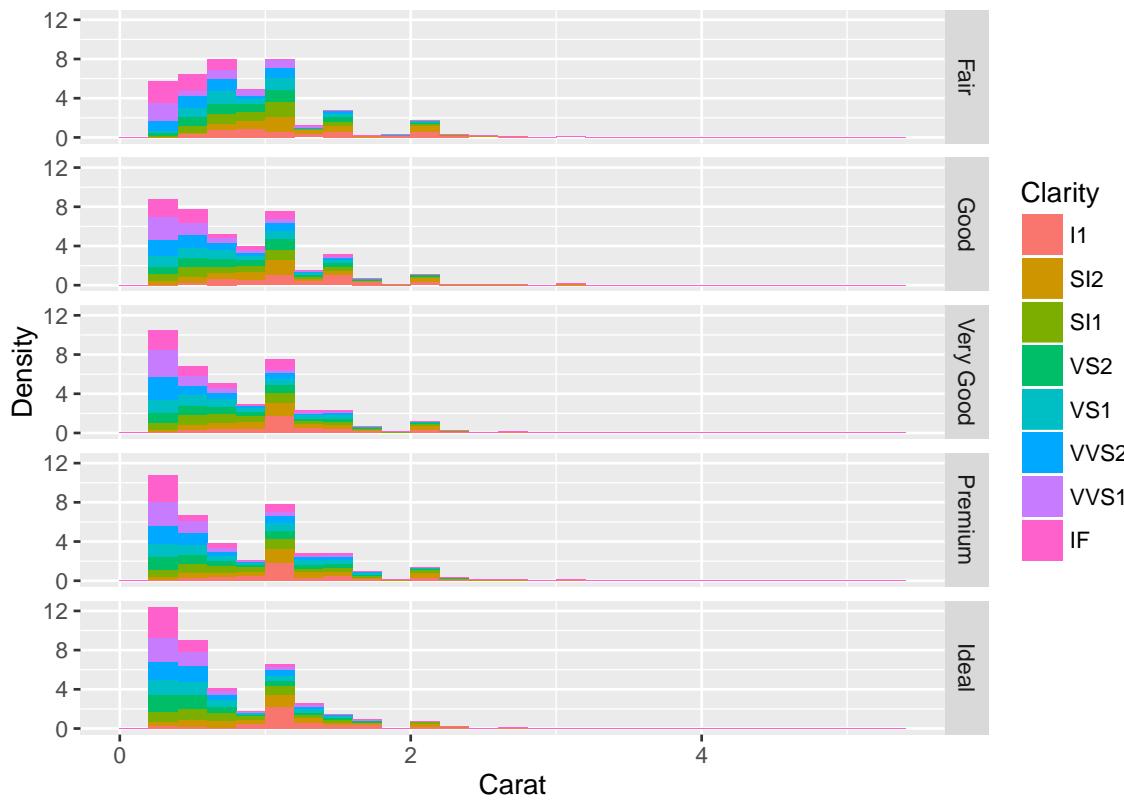
Please refer to the `ggplot2` documentation website for help. I also found UPENN's `ggplot2` intro tutorial from 2010 useful.

Due by Feb 26th 2016 (after the next lecture). Turn in your `.R` script by pushing it to your public github repo and emailing the URL to your instructor (at `curtisk+econ294_05@ucsc.edu`)

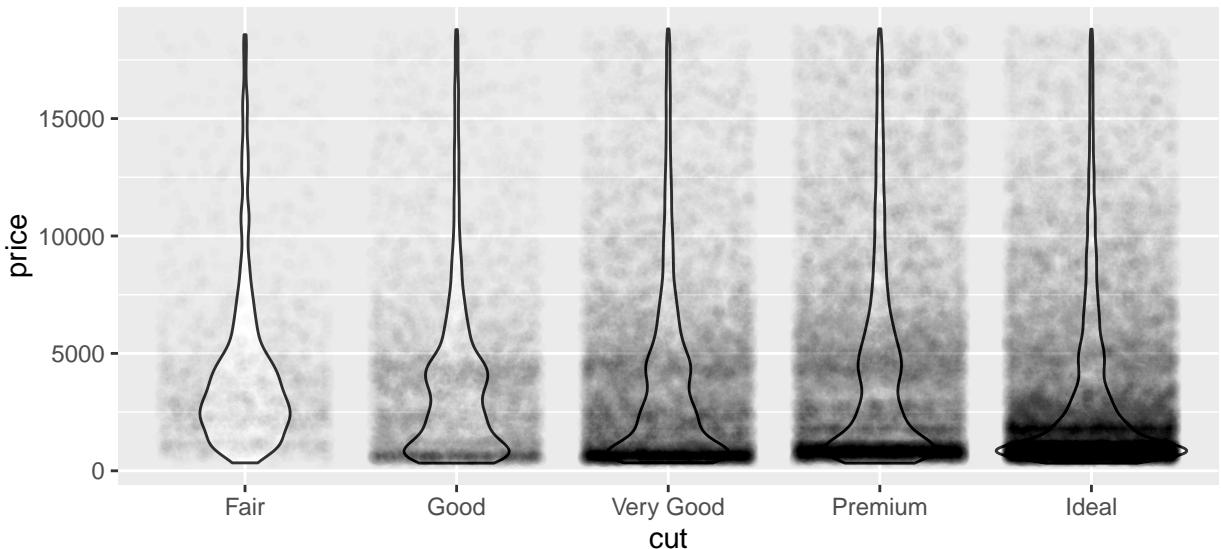
1. From `ggplot2`'s diamond's dataset, approximately replicate the following plots.
 - a. Scatter plot of diamond prices, volume ($x * y * z$), with point size `carat`, color `clarity`, and the x-axis and y-axis log scale (e.g `scale_x_log10`).



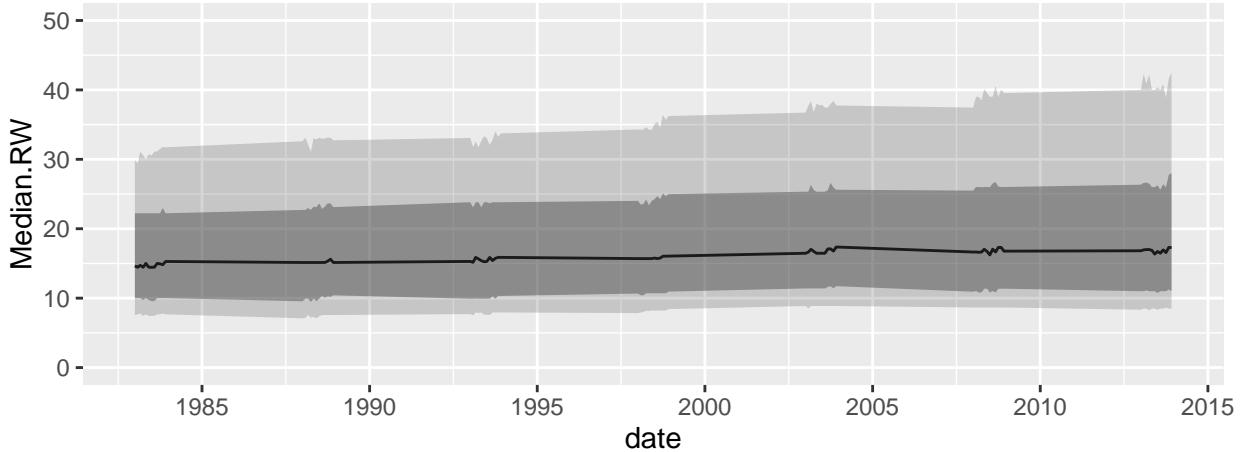
b. Stacked histograms showing density of diamonds by carat, stacked by clarity, broken down by cut type. (Check out `geom_histogram`, `facet_grid`, and the use of `..density..` in `geom_histogram`)



c. Violin plots of price, by cut. With jittered, very high transparency scatterplots of price. (`geom_violin`, `geom_jitter`, `alpha`.)



3. From the `org_example` dataset, approximately replicate the following plots.
- Plot monthly median `rw` in a line plot, along with the band for the first and third quartiles, and first and ninth deciles. (There may be many ways to do this, I used dplyr single table verbs, plus `geom_line`, `geom_ribbon`, `alpha` and `ylim`.)



- Plot monthly median real wages in a line plot, broken down into education level.

