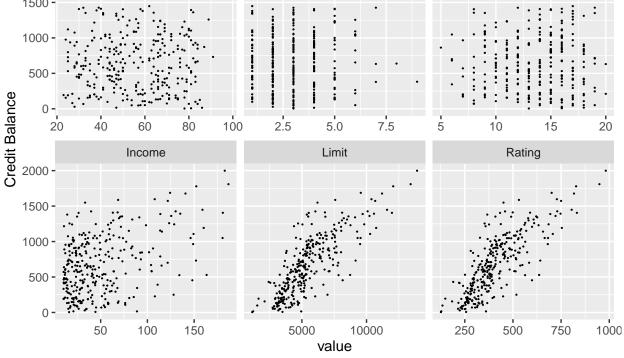
## Faceted Scatterplots and Boxplots: Response vs. Predictors

36-600

```
Fall 2022
suppressMessages(library(tidyverse))
df <- read.csv("PROJECT_1/creditBalance.csv",stringsAsFactors=TRUE)</pre>
# Faceted scatter plots of response v. quantitative predictors
df.new <- df %>% dplyr::select(.,Income,Limit,Rating,Cards,Age,Education) %>% gather(.)
num.var <- 6
ggplot(data=df.new,mapping=aes(x=value,y=rep(df$Balance,num.var))) +
  geom_point(size=0.1) +
  facet_wrap(~key,scales='free_x') +
  ylab("Credit Balance")
                                               Cards
                                                                          Education
  2000 -
  1500 -
  1000 -
   500
                                         2.5
                                                         7.5
      20
                    60
                                 100
                                                 5.0
                                                                          10
                                                                                          20
```



```
# Faceted boxplots of response v. categorical predictors
df.new <- df %>% dplyr::select(.,Gender,Student,Married) %>% gather(.)
```

## Warning: attributes are not identical across measure variables; ## they will be dropped

```
num.var <- 3
ggplot(data=df.new,mapping=aes(x=value,y=rep(df$Balance,num.var))) +
  geom_boxplot() +
  facet_wrap(~key,scale='free_x') +
  ylab("Credit Balance")</pre>
```

