The Impact on Job Interest of Beginner Programmers*

TBD

TBD

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Abstract

First sentence. Second sentence. Third sentence. Fourth sentence.

1 Introduction

2 Data

```
#### Message ####
# Show code for reviewers
#
# // Variables
# Y: MoneyForLearning
# X: Age, CityPopulation, CommuteTime, Income, MonthsProgramming, SchoolDegree
# c: Gender
#
# // Clean csv
# https://github.com/bonjwow/new-coders/blob/main/inputs/data/clean_new-coders.csv
#
#

#### Get data ####
dfNewCoders <-
  readr::read_csv("../../inputs/data/clean_new-coders.csv")
```

```
## Parsed with column specification:
## cols(
##   Age = col_double(),
##   CityPopulation = col_double(),
##   CommuteTime = col_double(),
##   Gender = col_double(),
##   Income = col_double(),
##   MoneyForLearning = col_double(),
##   MonthsProgramming = col_double(),
##   SchoolDegree = col_double()
## )
```

*https://github.com/bonjwow/new-coders

```
#### Descriptive statistics ####
stargazer::stargazer(data.frame(dfNewCoders), type="text")
```

```
##
## ================================================================================
## Statistic            N      Mean     St. Dev.   Min  Pctl(25) Pctl(75)    Max
## --------------------------------------------------------------------------------
## Age                7,022   29.774     7.684     13      25       33       71
## CityPopulation     7,022   1.221      0.777      0      1        2         2
## CommuteTime        7,022   2.199      1.451      0      1        3         5
## Gender             7,022   0.174      0.379      0      0        0         1
## Income             7,022 42,966.890 59,162.290 6,000  17,000   55,000  1,000,000
## MoneyForLearning   7,022 1,032.273  4,030.722    0      0       399     170,000
## MonthsProgramming  7,022   23.986     46.496     0      3        26       744
## SchoolDegree       7,022   1.676      0.968      0      1        2         4
## --------------------------------------------------------------------------------
```

```
#### Test internal consistency with Cronbach's alpha ####
psych::alpha(dfNewCoders)
```

```
##
## Reliability analysis
## Call: psych::alpha(x = dfNewCoders)
##
##   raw_alpha std.alpha G6(smc) average_r  S/N    ase mean   sd median_r
##      0.0074       0.3    0.29     0.051 0.43 0.0018 5507 7437    0.044
##
##  lower alpha upper     95% confidence boundaries
## 0 0.01 0.01
##
##  Reliability if an item is dropped:
##                    raw_alpha std.alpha G6(smc) average_r  S/N alpha se  var.r
## Age                  0.00755      0.25    0.24     0.046 0.34  1.9e-03 0.0029
## CityPopulation       0.00760      0.28    0.27     0.054 0.40  1.9e-03 0.0035
## CommuteTime          0.00760      0.29    0.28     0.054 0.40  1.9e-03 0.0044
## Gender               0.00760      0.32    0.31     0.063 0.47  1.9e-03 0.0039
## Income               0.00187      0.26    0.25     0.047 0.34  3.3e-04 0.0048
## MoneyForLearning     0.00025      0.28    0.28     0.053 0.40  2.2e-05 0.0055
## MonthsProgramming    0.00740      0.28    0.27     0.053 0.39  1.9e-03 0.0043
## SchoolDegree         0.00760      0.21    0.20     0.037 0.27  1.9e-03 0.0041
##                    med.r
## Age                0.041
## CityPopulation     0.047
## CommuteTime        0.052
## Gender             0.054
## Income             0.041
## MoneyForLearning   0.035
## MonthsProgramming  0.041
## SchoolDegree       0.033
##
##  Item statistics
##                       n raw.r std.r r.cor r.drop    mean      sd
## Age                7022 0.159  0.44 0.302  0.159 3.0e+01 7.7e+00
```

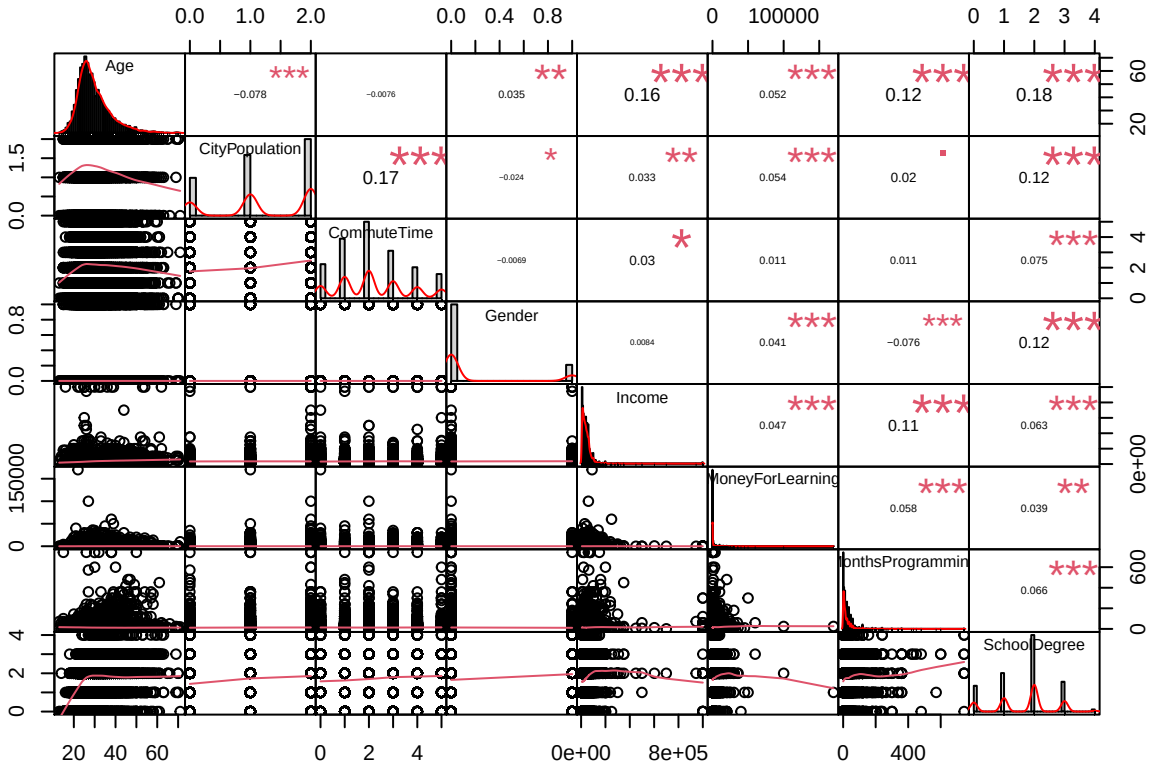
```
## CityPopulation    7022 0.036  0.39 0.197  0.036 1.2e+00 7.8e-01
## CommuteTime       7022 0.031  0.39 0.178  0.031 2.2e+00 1.5e+00
## Gender            7022 0.011  0.33 0.065  0.011 1.7e-01 3.8e-01
## Income            7022 0.998  0.44 0.268  0.048 4.3e+04 5.9e+04
## MoneyForLearning  7022 0.114  0.40 0.176  0.047 1.0e+03 4.0e+03
## MonthsProgramming 7022 0.110  0.40 0.194  0.110 2.4e+01 4.6e+01
## SchoolDegree      7022 0.066  0.50 0.407  0.066 1.7e+00 9.7e-01
##
## Non missing response frequency for each item
##                    0    1    2    3    4    5 miss
## CityPopulation  0.22 0.35 0.44 0.00 0.00 0.00    0
## CommuteTime     0.13 0.22 0.28 0.17 0.11 0.09    0
## Gender          0.83 0.17 0.00 0.00 0.00 0.00    0
## SchoolDegree    0.15 0.22 0.44 0.17 0.01 0.00    0
```

```
#### Correlation analysis ####

### Print correlation coefficient
round(cor(dfNewCoders), 3)
```

```
##                      Age CityPopulation CommuteTime Gender Income
## Age                1.000         -0.078      -0.008  0.035  0.156
## CityPopulation    -0.078          1.000       0.172 -0.024  0.033
## CommuteTime       -0.008          0.172       1.000 -0.007  0.030
## Gender             0.035         -0.024      -0.007  1.000  0.008
## Income             0.156          0.033       0.030  0.008  1.000
## MoneyForLearning   0.052          0.054       0.011  0.041  0.047
## MonthsProgramming  0.125          0.020       0.011 -0.076  0.106
## SchoolDegree       0.181          0.119       0.075  0.115  0.063
##                    MoneyForLearning MonthsProgramming SchoolDegree
## Age                           0.052             0.125        0.181
## CityPopulation                0.054             0.020        0.119
## CommuteTime                   0.011             0.011        0.075
## Gender                        0.041            -0.076        0.115
## Income                        0.047             0.106        0.063
## MoneyForLearning              1.000             0.058        0.039
## MonthsProgramming             0.058             1.000        0.066
## SchoolDegree                  0.039             0.066        1.000
```

```
### Print correlation matrix
PerformanceAnalytics::chart.Correlation(dfNewCoders,
                                        histogram = TRUE,
                                        pch = 19)
```



3 Model

4 Results

5 Discussion

Appendix

6 References