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# Personal Information

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Email & Skype : seymakalay@hotmail.com

Marital Status: Single Day of Birth: 16.05.1987 Place of Birth: Turkey-Istanbul

# **Objectives**

To work for the organization to the best of my knowledge and ability from where the organization could benefit from my programming, app building and machine learning skills.

# Education

#### Joint PhD in Applied Economics and Management (AEM),

University of Bergamo & Pavia (Italy), Sept 2017 - Current.

#### Master in Finance,

University of Siena (Italy), Nov 2013 - June 2016.

#### Certificate in Masters of Business Administration Program,

University of Auburn (USA), Spring 2011 - Fall 2012.

#### Bachelor in Astronomy and Space Science,

University of Istanbul (Turkey), Fall 2016 - Spring 2010.

# Experience

#### Researcher - Statistics,

University of Bergamo & Pavia (Italy), Sept 2017- Current.

- Applying machine learning technique to find out the probability of credit default and implementing some application<sup>1</sup>.

#### Intern - Portfolio,

Ziraat Portfolio (Turkey), Jan 2016 - Sept 2016.

- Observed equity and bond market, familiar with the behavioral finance, created a statistical model to maximize the portfolio's return and proved the model efficiency by tracing the data.

#### Intern - Portfolio,

Invest-AZ (Turkey), Nov 2015 - Dec 2015.

- To analyze the companies by looking at their income statements and balance sheets to make sure it is beneficial to invest in those companies.

#### Intern - Accounted,

Varkan Group (Turkey), Sept 2012 - Dec 2012.

- Have been effectively responsible of recording accounting cycle and kept tracking consistence balances on both suppliers and purchasers on the company's system.

#### Part time - Real Estate

Emlak Ada (Turkey), Jun 2007 - Jan 2010.

- Was actively involved in the marketing and communications of the firm. Drafted contracts, scheduled meetings, handled negotiations, updated company website, collaborated with other real estate agencies, generated new solutions and conducted research on customer needs and preferences.

# Skills and Competencies

Languages: Turkish mother tongue, advance in English, intermediate in Italian, beginner in Spanish.

Computer Skills: Latex, Microsoft Office, Rstudio, Shiny Application, Stata.

**Personal Strengths:** Creative, analytic thinker, problem solver, good at teamwork, interpersonal skills, determined, disciplined, accountable, highly motivated, responsible, strong work ethics, positive mindset, adaptable, rapid learning capability.

# **Awards and Honors**

PhD Fund, 2017 - Current.

DSU - Toscana, 2013 - 2016.

TPV (Turkish Gas Foundation Scholarship), 2007 - 2010.

Turkish Women Community Scholarship, 2007 - 2010.

Yapi Kredi Bank Scholarship, 2006 - 2010.

### References

Mr. Birkan Karataş: Ziraat Portfolio; Fund Manager; Mobile: +90 532 5111997; bkaratas@ziraatportfoy.com.tr

Prof. Zikri Altun: Marmara University; Head of the department of Physic; zikalt@marmara.edu.tr

<sup>&</sup>lt;sup>1</sup>Please see at: https://github.com/seymakalay

#### Prof. Claudio Pacati: Department of Economics and Statistics; claudio.pacati@unisi.it

When you knit this R Markdown document, you will see that the histogram is printed to the page, along with the R code. This document can be set up to hide the R code in the webpage, just delete the comment (hashtag), from the cold folding option in the yaml header up top. For purposes of letting yourself see the code, and me see the code, best to keep it the way that it is. You learn all of these things and more can be customized in each R code block.

# The big idea

Use this lab journal to record what you do in R. This way I will be able to see what you are doing and help you along the way. You will also be creating a repository of all the things you do. You can make posts about everything. Learning specific things in R (project unrelated), and doing things for the project that we will discuss at the beginning of the Fall semester. You can get started now by fiddling around with googling things, and trying stuff out in R. I've placed some helpful starting links in the links page on this website

# What can you do right now by yourself?

It's hard to learn programming when you don't have specific problems that you are trying to solve. Everything just seems abstract.

I wrote an introductory programming book that introduces R, and gives some concrete problems for you to solve

To get the hang of journaling and solving the problems to learn programming, my suggestion is that you use this .Rmd file to solve the problems. It would look like this:

# Problem 1

Do simple math with numbers, addition, subtraction, multiplication, division

```
1+2
## [1] 3
2*5
## [1] 10
5/3
## [1] 1.666667
(1+6+4)/5
## [1] 2.2
```

# Problem 2

Put numbers into variables, do simple math on the variables

```
a<-1
b<-2
a+b
```

## [1] 3

```
d < -c(1,2,3)
e < -c(5,6,7)
d+e
## [1] 6 8 10
d*e
## [1] 5 12 21
d/e
```

## [1] 0.2000000 0.3333333 0.4285714

### Problem 3

Write code that will place the numbers 1 to 100 separately into a variable using for loop. Then, again using the seq function.

```
# for loop solution
# i becomes the number 1 to 100 at each step of the loop
a <- length(100) # make empty variable, set length to 100
for (i in 1:100){
  a[i] <-i #assigns the number in i, to the ith index of a
}
print(a)
                2
                    3
                         4
                             5
                                  6
                                      7
                                          8
                                               9
                                                  10
                                                           12
                                                                13
                                                                        15
                                                                             16
                                                                                 17
                                                                                      18
##
     [1]
            1
                                                       11
                                                                    14
    [19]
          19
               20
                   21
                        22
                            23
                                 24
                                     25
                                          26
                                              27
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                                                                31
                                                                    32
    [37]
##
          37
               38
                   39
                        40
                            41
                                 42
                                     43
                                          44
                                              45
                                                  46
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                                                           48
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##
    [55]
          55
               56
                   57
                        58
                            59
                                 60
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                                          62
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##
    [73]
          73
               74
                   75
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                                                                    86
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                                     79
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   [91]
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               92
                   93
                        94
                            95
                                 96
                                     97
                                          98
                                              99 100
# for loop solution #2
a<-c() #create empty variable using combine command</pre>
for (i in 1:100){
  a<-c(a,i) # keeps combining a with itself and the new number in i
}
print(a)
##
     [1]
                     3
                         4
                             5
                                  6
                                      7
                                          8
                                               9
                                                  10
                                                       11
                                                           12
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                                                                31
##
    [19]
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                        22
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##
    [37]
          37
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##
    [55]
          55
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                   57
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                                          62
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                                                           66
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##
    [73]
          73
               74
                   75
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                                                       83
                                                           84
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    [91]
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               92
                   93
                        94
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                                96
                                     97
                                          98
                                              99 100
##
# seq solution
a \leftarrow seq(1,100,1) # look up help for seq using ?seq() in console
print(a)
     [1]
                             5
                                           8
                                               9
                                                  10
                                                       11
                                                           12
                                                                13
                                                                                      18
                                                                    14
                                                                        15
                            23 24
                                    25
                                         26
                                             27 28
                                                       29
                                                           30 31
    [19]
          19
              20
                   21
                       22
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                                                                                 35
```

```
[37]
           37
                    39
                                 42
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##
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                        40
                             41
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                                                                 49
##
    [55]
           55
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##
    [73]
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##
    [91]
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                                          98
                                               99 100
```

# Replace this with problem 4

And keep going. Try to solve the problems with different scripts that provide the same solution. Good luck, Happy coding.  $\ \ 1->$