



#### resources designed for graduate students

## Want to learn R?

Tuğba Öztürk



#### Hello!

I am Tuğba.

I am a statistical biophysicist, a workshop facilitator at GradProSkills, a member of RLadiesMTL.

You can find me at <a> ©</a> etugbaoztrk and <a> ©</a> etugbateaches.









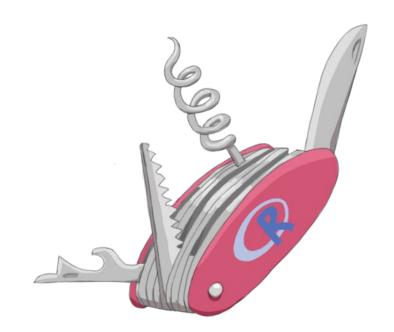


- Robust and free!
- Extendible (many R packages)
- A dynamic community



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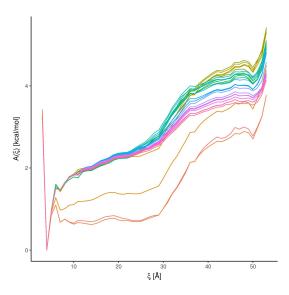
#### for data analysis

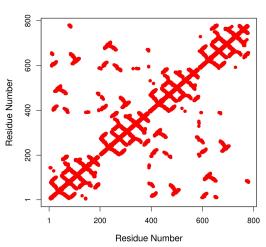
year	month	day	dep_time	arr_time	origin	dest	air_time
2013	1	1	517	830	EWR	IAH	227
2013	1	1	533	850	LGA	IAH	227
2013	1	1	542	923	JFK	MIA	160
2013	1	1	544	1004	JFK	BQN	183

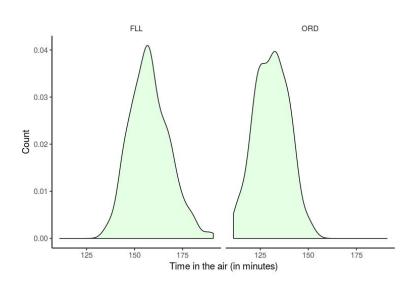
#### for data analysis

```
month
                          day
                                dep time arr time
                                                          origin dest air time
        year
        2013
                                    517
                                                830
                                                           EWR
                                                                    IAH
                                                                             227
        2013
                                    533
                                                850
                                                           LGA
                                                                    IAH
                                                                             227
        2013
                                    542
                                                923
                                                           JFK
                                                                    MIA
                                                                             160
my_data %>% filter( origin == "JFK", dest == "FLL", month > 10 ) %>% group_by(year) %>% summarize( average=mearl(air_time) )
```

#### for data visualization

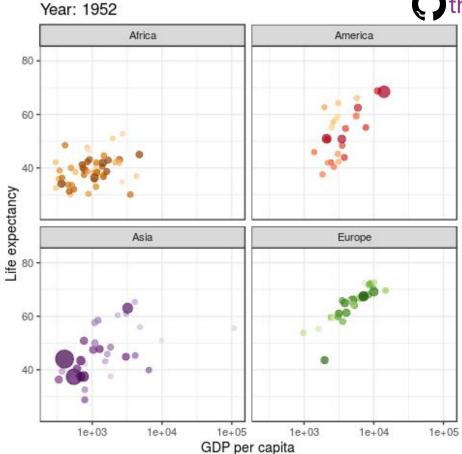






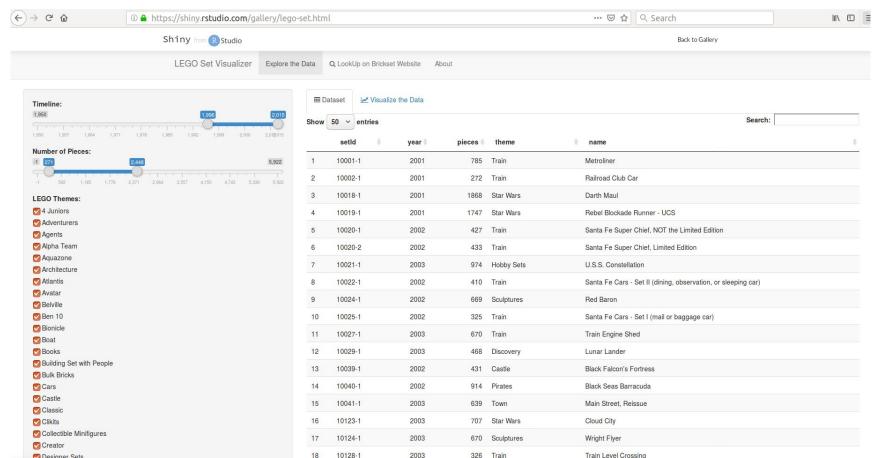
#### for data visualization

Thomasp85/gganimate



#### Why learn R? for web applications/dashboards

https://shiny.rstudio.com/gallery/lego-set.html



#### for making personal websites

https://tugbateaches.github.io



① A https://tugbateaches.github.io

··· ☑ ☆ Q Search

Tugba N. Ozturk

Teaching

Talks Programming

Notes



Hello,

I'm a PhD candidate in Physics at Concordia University. I work on molecular modelling of membrane proteins - yes, I am one of those physicists who are supposed to show you a movie of a protein jiggling in the middle of their talk. I love computational biochemistry/biophysics, coding (especially with R and Python!), teaching & learning and talking about any of these topics!

I graduated from the Koc University with a MS in Computational Sciences and Engineering in 2014. Same year, I started my PhD in Physics at Concordia University, where I am working on molecular modelling of ion channels and trasporters under the supervision of Dr. Guillaume Lamoureux at Rutgers University-Camden, I expect to graduate this year.

My full CV is available here.

A quick note about my website: I have built this website using the amazing tutorial by Emily C. Zabor . I like generating documents (tutorials, presentations, websites) with R. I also like the fact that there is an R package called tinytex - I think it's cute.

#### for impressionist artwork





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- 1. Local resources:
  - GradProSkills workshops (GPDI 515 and GPDI 517)
  - RLadiesMTL meetups!

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- 2. Online resources:
  - Online courses (Coursera, EdX, DataCamp, Udemy)
  - Tutorials (Youtube, RStudio, GitHub)
  - Twitter (@hadleywickham, @jennybryan, @juliasilge, @dataandme, @RLadiesMTL)
  - Blogs (r-tutor.com, r-bloggers.com)

#### R for Psychology

- Learning Statistics with R
- Course notes for Psychology Statistics
- R-bloggers' suggestions for researchers in psychology (including lecture notes, mailing lists, online books and workshops)
- Popular websites:
  - https://rpsychologist.com
  - https://personality-project.org/r

# Any questions?

## Thank you!

You can find my slides @tugbateaches/whyR http://neuroplausible.com/programming