Introduction to Github

STA 325, Supplemental Material

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Agenda

- Datathon teams
- Introduction to github and git
- Basic commands
- Working on small assignment with your Datathon teams

Groups for Datathon

Find a reminder below of your datathon teams (Please work in your datathon teams today)

```
groupLeaders <- c("Donheiser, Julia ", "Wohl, Julia", "Rajan, Hari",
      "Donahoe, Grace", "Chen, Carolyn", "Holland, Ethan",
      "Ben Alexander")

Donheiser <- c("Agarwal, Naman", "Deng, Ziqi","Lin, Vincent")
Wohl <- c("Gao,An", "Lyu, Cheng", "Xu,Yingzhi")
Rajan <- c("Metz, Audreya", "Giraud, Paul", "Ma, Calvin")
Donahoe <- c("Marsalek, Oskar", "Gu, Yunxiang","Shmueli, Sara")
Chen <- c("San-Martin, Jose", "Hsiao, Man-Lin","Tan, Michael")
Holland <- c("Taylor, Moriah", "Huang, Howard","Wang, Harry")
Alexander <- c("Malone, Alexis", "Jiang, Debra","Xiao, Claire")
```

Github

What is Github?

What is the difference between Github and git?

1. Github is a place that allows for software to be stored and one to work with a distributed version control system (git).
2. git is a distributed version control system.

Remark: Github and git are not the same thing!

- ► You need to install git
- ► You also need a Github account

Installation of git

```
https://git-scm.com/book/en/v2/
Getting-Started-Installing-Git
```

- These are all from the command line (in my option these are easier than using a gui/browser but there are options for these if you prefer).
- You'll need a terminal window installed on your computer in order to install git using the above url.

Getting a github account

Please set up a github account (if you don't already have one) at:

https://github.com/

Demo using git

Let's create a new repository called `intro-git`.

Basic commands

```
git clone path
git add file
git commit -m "Adding new file."
git push origin master
git pull origin master
```

Other commands

```
git status
git log
```

Suggestions

- ▶ Push/Pull often to keep your current repository up to date with the "master" repository.

- ▶ If you and others are working on same repository at once, learn about branching and advanced git commands, so that you do not have merge issues.
  `https://github.com/Kunena/Kunena-Forum/wiki/`
  `Create-a-new-branch-with-git-and-manage-branches`

- ▶ For Datathon, I recommend that one person is in charge of the master repository (group leader or the main person working on the code).

Exercise

0. Install git and create github account if you don't already have one.
1. Create a repository for your homework on hashing.
2. Add the .Rmd file to your repository using git commands and commit the changes.
3. Complete your hashing homework in github this week to help you prepare for the datathon.