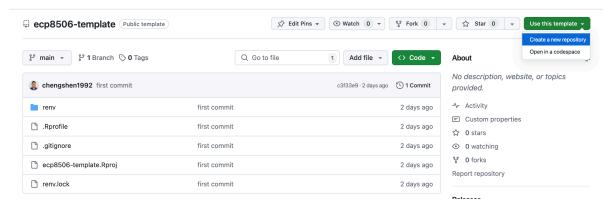
# Homework 1

## 1 Objectives:

- Create a new github repository under your github account using ecp8506-template as a template repository.
- Perform git clone to clone the repository to your local MSI disk.
- Create a new file in your local repository, then perform git add, git commit and git push to add the new file to your remote github repository.

### 1.1 Create a new github repository

• Navigate your browser to ecp8506-template github repository. Click **Use this template** on the top right corner.



• Name the repository as ecp8506-your x500, make sure the owner is your github account, then click the button to create repository.

### Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? <u>Import a repository.</u>

Required fields are marked with an asterisk (\*). Repository template UMN-ECP-PMX/ecp8506-template ▼ Start your repository with a template repository's contents. Include all branches Copy all branches from UMN-ECP-PMX/ecp8506-template and not just the default branch. Owner \* Repository name \* chengshen1992 ecp8506-cheng423 ecp8506-cheng423 is available. Great repository names are short and memorable. Need inspiration? How about literate-octo-guacamole? **Description** (optional) **Public** Anyone on the internet can see this repository. You choose who can commit. You choose who can see and commit to this repository. (i) You are creating a public repository in your personal account. **Create repository** 

### 1.2 Clone the repository to local

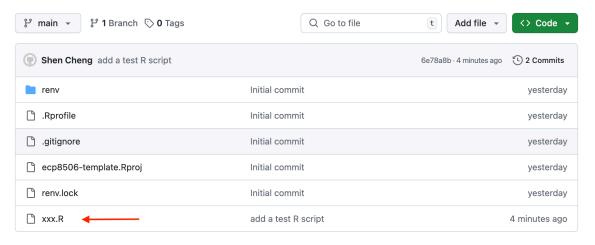
- Start a new Rstudio Server session on MSI.
- Use RStudio IDE functionality to start a project using Version Control or in terminal, perform git clone to clone the repository to local MSI disk.
- Open the R project file (.rproj) file in the local repository.
- Run renv::restore() to restore the installation of all the R packages. This step might take quite a few minutes to complete.

#### 1.3 Create a new file in the local repository and add it to the remote repository

- Create a new R script in the local repository, names it as you like, for example xxx.R
- Use RStudio IDE functionality to add, commit and push the new file to the remote repository.
- If you are using terminal:
  - In terminal, run git add xxx.R.
  - In terminal, run git commit -m "add a test R script". Here, -m means leave a message with the text inside the "" as the message contents.
  - In terminal, run git push. If you see the output looks like this, your have successfully added the new file in your remote github repository.

cheng423@acn29 [/panfs/jay/groups/37/ecp8506/cheng423/ecp8506-cheng423] % git push
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 128 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 280 bytes | 280.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:chengshen1992/ecp8506-cheng423.git
 05238fe..6e78a8b main -> main

\* Take a screenshot of your remote github repository and uploaded it to Canvas.



### 1.4 Bouns

Create a a scratch repository with and initialize **renv** package to have a reproducible environment with all of your favorite packages.