

Statistical Learning Methods

[223490-0286]

Bogumił Kamiński

www.bogumilkaminski.pl



ABC Git

1. <https://guides.github.com/introduction/git-handbook/>
2. <https://guides.github.com/activities/hello-world/>
3. <https://guides.github.com/introduction/flow/>

We will use

<https://www.sublimemerge.com/>

as it is easier to use GUI than CLI

but there are many decent alternatives:

<https://git-scm.com/downloads/guis>

ABC of package management in the Julia programming language

1. Each project may have its own private package set
2. There exists one federated package repository; its path is indicated by a system variable “JULIA_DEPOT_PATH”; by default it is “~/julia”
3. Environment configuration is stored in two files
 1. Project.toml: direct project dependencies with version bounds
 2. Manifest.toml: exact representation of all dependencies (direct and indirect) with exact version numbers

Project environments

- One global (default in REPL)
- Current working directory, if configured (default in Jupyter notebook)
- Explicit activation instructions
 - “activate [katalog]” in package manager mode
 - “using Pkg; Pkg.activate("katalog")”
 - Set by “--project” parameter when running Julia from CLI

Basic package manager functions in Julia

- status state of project environment
- activate activates project environment
- add add package
- remove remove package
- update update packages to latest versions
- pin fix a package at current version
- free allow package to be updated

Example examination questions

1. What is Git and how is it used?
2. What is GitHub and how is it used?
3. What does it mean that Git is a distributed version control system?
4. How does Git track changes in code?
5. What the following operations in Git do: “stage”, “commit”, “branch”, “merge”, “pull” i “push”, “pull request”?
6. What do the following operations in Julia package manager do: “status”, “activate”, “add”, “remove”, “update”, “pin”, “free”?
7. What is the role of the following files in Julia: Project.toml i Manifest.toml?
8. Where does Julia store package repository?