Version Control – the Path of the Octocat

Beginner

- install git
- create a GitHub repository
- clone a GitHub repository
- configure your username and email
- add files
- commit
- push and pull your local repository to/from GitHub
- add a .gitignore file
- view the commit history of a file or folder

Intermediate

- revert to an older commit
- create a branch
- switch between branches
- merge branches
- resolve merge conflicts
- examine the difference between two commits
- check who edited which line
- configure SSH keys so that you don't need to enter your password
- truncate the git history to a certain commit
- remove big files from the git history

Advanced

- use a git plugin for versioning data or Jupyter notebooks
- rebase branches
- cherry-pick single files from an older commit
- move an older commit to a separate branch
- know what a detached head is
- apply git-bisect
- configure an issue template on GitHub
- configure git Actions
- set up a local git or GitLab server