National University of the Altiplano
Faculty of Statistical and Computer Engineering
Professor: Fred Torres Cruz
Author: Eva Ruth Mamani Josec

Assigned Work - No. 001

1. How does GitHub work?

GitHub is a web-based platform that uses Git to track changes in code and projects. It enables multiple users to collaborate on programming projects by managing versions, changes, and contributions.

- It hosts repositories (repos) online.
- Users can clone repositories to their local machines, make changes, and push updates.
- Through pull requests, collaborators can suggest changes and have them reviewed.
- It maintains a complete history of all modifications.
- Supports team development and open-source contributions.

2. What is Git?

Git is a version control system used to manage and track changes in files, especially code.

- It allows users to save snapshots of their project.
- Developers can work on separate branches before merging them.
- It enables collaboration in distributed environments.
- Used primarily via the command line or integrated with GitHub.

3. Application in Computational Statistics

In the course of Computational Statistics, Git and GitHub are essential tools to:

- Save and version code written in R or Python.
- Share and collaborate on statistical analysis projects.
- Keep organized and reproducible workflows.
- Document computational experiments and results.

4. Journal of Statistical Software

- **Name:** Journal of Statistical Software
- **Editor:** American Statistical Association
- **Website:** `https://www.jstatsoft.org`
- **Access:** Open Access (free to read and download)
- **Scope:** Peer-reviewed articles about statistical software, packages, and computational methods in R, Python, etc.

This journal is a valuable resource for students and researchers in computational statistics.

"Learning Git and GitHub is fundamental for a modern statistician working in computation."