

# Introduction to Git

Mechanical & Thermal Engineering

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# Agenda

- Background
- What is Git
- Benefits of using Git
- Branching
- Working with Git



# Background

- Local program development
  - Select access to programs
- Need for traceability
- Need for review
- Need for integrity

# What is Git?

- Free and Open-Source software for version control (SCM)
- Fully distributed
- Able to handle large projects
- Make 'project specific' programs

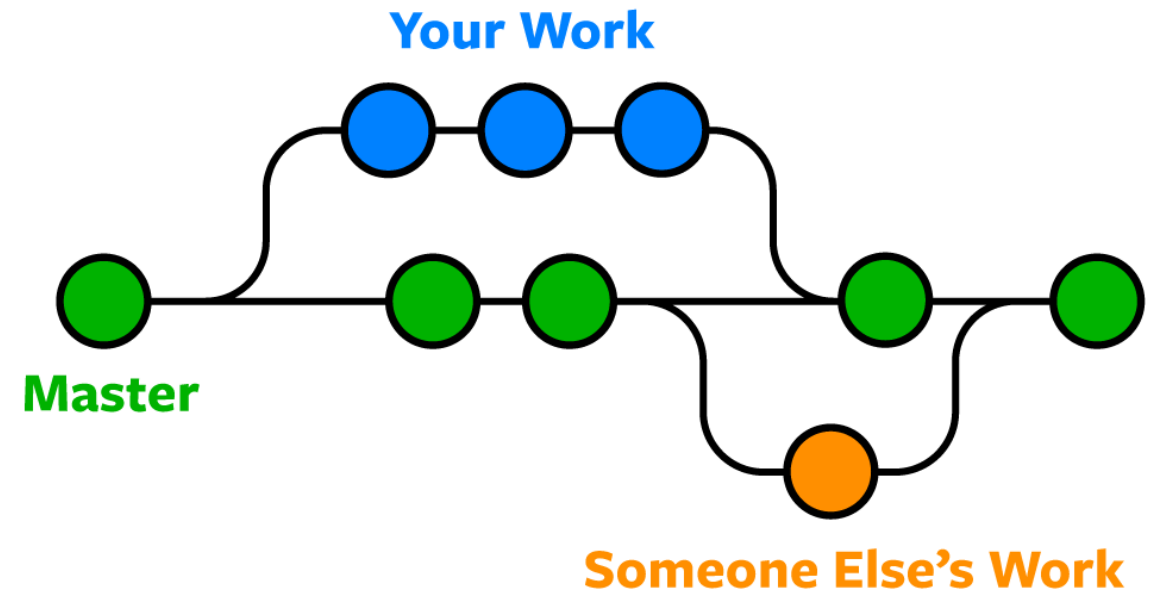
Current uses for Git:

- MATLAB files
- Python files
- OpenFOAM case files
- EES files
- More to come

# Benefits of using Git

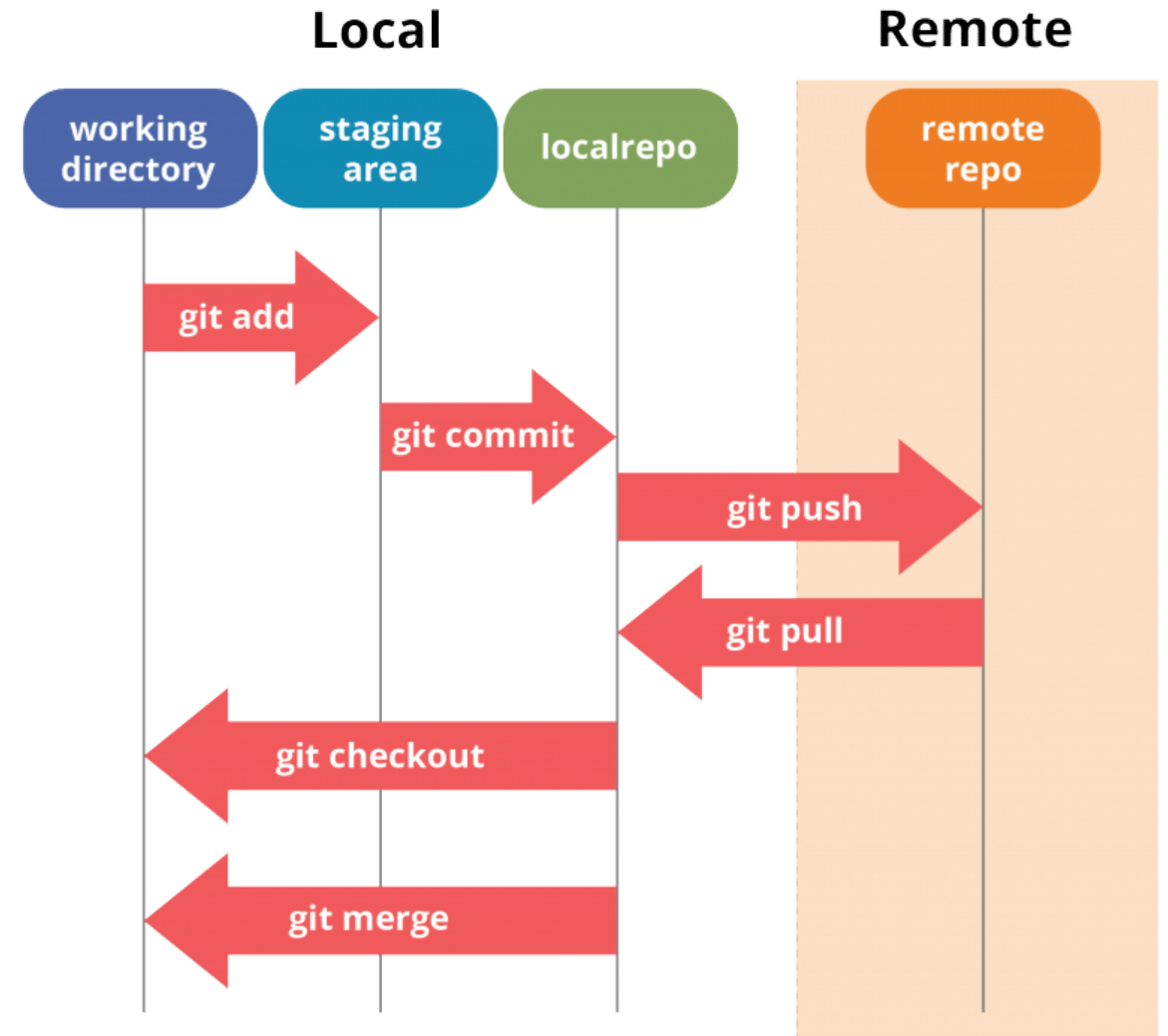
- Control changes
- Adding traceability
- Review of code
- Create custom programs without modifying existing code
- Ability to use already familiar tools

# Git branching



# Working with Git

- Git GUI
- Git bash
- Local and remote repository
- Gitignore







# Resources

- Git book: <https://git-scm.com/book/en/v2>
- <https://www.atlassian.com/git/tutorials/using-branches/git-checkout>