

Getting Started

David G. Oppenheimer

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Preface

This is a Quarto book.

To learn more about Quarto books visit <https://quarto.org/docs/books>.

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1 Introduction

This is a book created from markdown and executable code.

See Knuth (1984) for additional discussion of literate programming.

```
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2 Summary

In summary, this book has no content whatsoever.

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3 Software Needed

3.1 R and RStudio

Go to [RStudio Desktop download page](#) to download the R and RStudio Desktop installers.

Note

You need to install R first, then RStudio.

The R link will take you to the [The Comprehensive R Archive Network](#) where you can download an R installer for your operating system.





The RStudio link will download the appropriate installer for your operating system.

Download and launch the installers and follow the installation instructions.

3.2 Git and a GitHub Account

In case of fire



-  1. `git add .`
-  2. `git commit -m "fire"`
-  3. `git push`
-  4. leave building

What is version control?

Version control, also known as source control, is the practice of tracking and managing changes to software code. Version control systems are software tools that help software teams manage changes to source code over time¹.

You can get all you need to know about git from the [Pro Git Book](#). This is a great introduction to version control and git.

3.2.1 User Manual

[Happy Git and GitHub for the useR](#)

This is an excellent resource for all things Git, GitHub, and RStudio. Use the left navigation to Quickly find relevant topics for how to integrate Git and GitHub with RStudio.

Tip

We will use `git` within RStudio. On macOS, RStudio will echo the mac terminal. I am using [Oh My Zsh](#) as my `zsh` framework, and [Wezterm](#) as my terminal emulator rather than the macOS default terminal application. I also have the latest `git` version installed through [Homebrew](#). I installed the [Starship](#) prompt (using Homebrew) to customize my terminal environment.

This means that I need to adjust the settings in RStudio to use my `zsh` environment. Go to *Tools* → *Global Options* → *Terminal* and choose `Zsh` from the drop-down menu for the *New terminals open with* option.

3.2.2 Git Tutorials

Important

Here are the learning objectives for the git section. After taking the tutorials, you will be able to:

1. Create a GitHub account.
2. Install Git on your local computer.
3. Create `ssh` keys to connect your local computer to GitHub.
4. Create a project and push it to GitHub.
5. Fork a project from GitHub.

¹from the Atlassian webpage on [What is version control?](#)

3.2.2.1 Videos

- [Git and GitHub for Beginners - Crash Course](#)
- [Git Tutorial for Absolute Beginners](#)
- [How to setup SSH in GitHub by example](#)
- [How to SSH into GitHub on Windows example](#)
- [How to Fork a GitHub Repository](#)

3.2.2.2 Text-based

- [Learn the Basics of Git in Under 10 Minutes](#)
- [How to Fork a GitHub Repository](#)
- [Fork a repository](#)

3.2.2.3 More Guides to Git

- [Introduction to Version Control](#) This is hosted by Atlassian, a company that uses their own cloud-based git repository called BitBucket. We will be using GitHub for all our work, so if you try tutorials on this site, remember to use `github` instead of `bitbucket` when connecting to the remote repository. Focus on the *Beginner* and *Getting Started* sections.
- [Git and GitHub](#)
- [An “advanced beginner” guide to git](#)

3.3 Install Git

3.3.1 macOS and Linux

Git is pre-installed on macOS and Linux computers, but users may want to update to the latest version.

On Macs, installation of Git is easiest using a package manager like [Homebrew](#). If you do not have Homebrew installed, follow the instructions on the [Homebrew homepage](#). Then install Git with:

```
brew install git
```

Check the installation by opening the terminal tab in RStudio (or use whatever terminal you already have open) and entering: