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Create a Reproducible Research Environment

Tutorial Introduction

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The people behind all of this

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Do not forget to…

Download and install:

Docker: https://docs.docker.com/install/

Conda: https://docs.conda.io/en/latest/miniconda.html

Register:

Github: https://www.github.com

DockerHub: https://hub.docker.com/

Overview

What is Reproducible Research?

What are possible solutions?

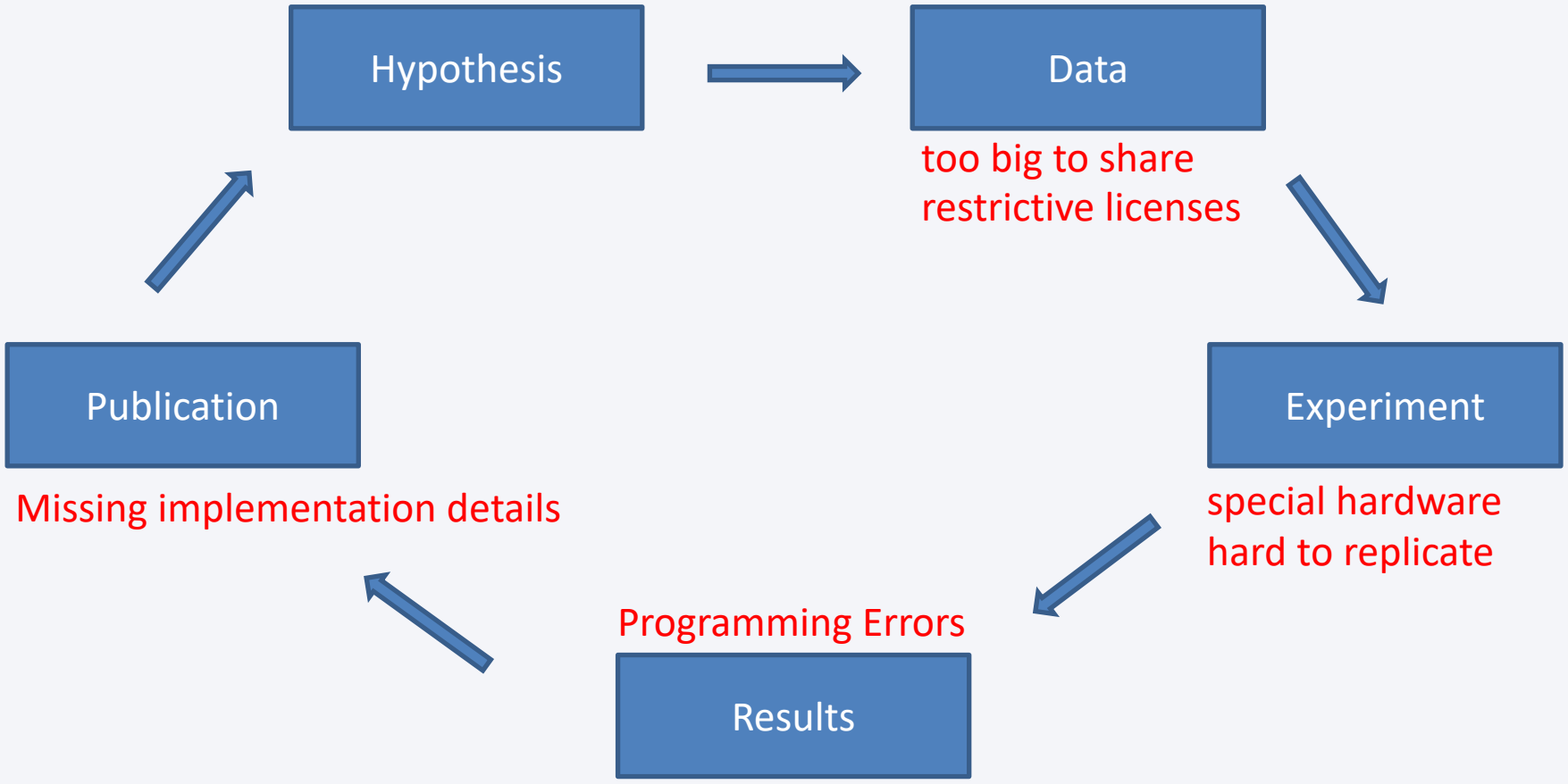
What are we going to do in this Tutorial?

- Share your Code
- Share your Environment
- Share your System
- Share your Service

Structure of a Part

- Theoretical
  - Problem Statement
  - History
  - Different Software
- Practical
  - Create an example
  - Use this example

The traditional research cycle



The Definition of Reproducible Research

Reproducible Research (RR) is the practice of **distributing**, along with a research publication, **all data, software source code, and tools required to reproduce the results** discussed in the publication. (orgmode.org)

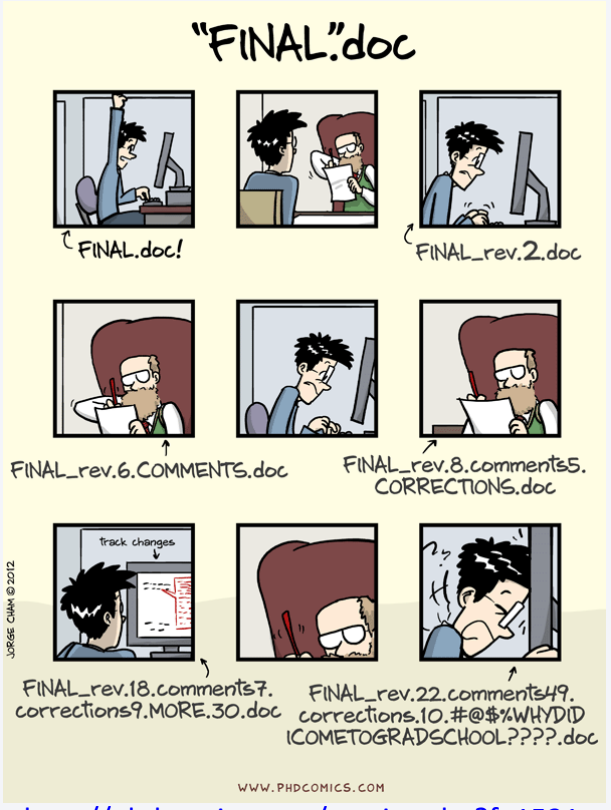
Approaches to Reproducible Research

Document every step of the way

Automate

Don’t do things by hand

Version Controlling



http://phdcomics.com/comics.php?f=1531