

# How to set up your computer as a statistician

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Student Panel: Wenbo Fei, Angel Garcia de la Garza, Emil Hafeez, Amy Pitts, Madison Stoms

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## Welcome

### Presentation by Jeff Goldsmith

- Always try to minimize the amount of time spent looking for things
- Apps to help with this:
  - Alfred (<https://www.alfredapp.com/>)
    - Search/launch application
    - Spotlight indexes everything on your computer, Alfred looks through file and directory *names*
  - Automator
    - Available for OS X
    - Write scripts to open certain applications or files
  - MacTeX (<http://tug.org/mactex/>)
    - LaTeX distribution for Mac users
    - *We will have a LaTeX session later in the semester*
- Keep frequently used apps open on the same desktop screens
  - Can be handy to have these in place consistently
- Keep naming conventions consistent
  - Like to have analysis, data, results, and drafts directories in every project folder
  - Use the same project infrastructure every time
- Reinstall R and RStudio twice a year
- Try not to let things get disorganized
- Deciding on a system (and sticking to it) early on will really help

### Panel Introduction

- Angel, 5th year PhD, Mac user, iPad for note taking
- Emil, 2nd year MS (Theory & Methods), Mac user, Android phone
- Amy, 2nd year PhD, Mac user, iPad for note taking
- Wenbo, 2nd year PhD, Mac user, iPad for note taking
- Maddie, 3rd year PhD, PC user

### What are some essential softwares to download?

- R (<https://www.r-project.org/>) and RStudio (<https://www.rstudio.com/>)
- Download LaTeX (<https://www.latex-project.org/get/#tex-distributions>):
  - Either MacTeX or PC version
  - Try learning it as soon as possible
- Things (<https://culturedcode.com/things/>)

- To-do list app
- WhatsApp (<https://www.whatsapp.com/>) and Slack (<https://slack.com/>)
  - Useful for communication in classes or clubs
- Flux (<https://justgetflux.com/>)
  - Blue-light filtering to reduce eye-strain
- Volume booster (<https://bit.ly/2VXsscQ>)
  - Chrome extension to increase volume
  - Useful for quiet Zoom recordings
- Notability (<https://apps.apple.com/us/app/notability/id360593530>)
  - App for iPad
  - Not free but worth it if you use for class
  - Can copy handwritten math into LaTeX code with premium version
- Mathpix (<https://mathpix.com/>)
  - Can screenshot math on a pdf document, transforms it to LaTeX code
  - Limit on Mathpix for how many pictures you can take
  - Can get around limit by creating a new account
- Magnet (<https://magnet.crowdcafe.com/>)
  - Reshapes windows on Mac automatically
  - Easier to split screen
- Google Drive (<https://www.google.com/drive/>)
  - Syncs well between devices and different operating systems
- Calendar
  - Built-in app on Mac
  - Useful for planning days, setting reminders

### **What is the process of writing LaTeX when you're starting out?**

- Writing in LaTeX is hard at first, but will get easier as you practice
- Mathpix can be a good tool because it's quick
- *Again, we will have a more in-detail LaTeX session later in the semester*

### **What software do you use to work collaboratively and keep track of different versions?**

#### **Any advice on collaborations that involve many shared documents?**

- You have to be willing to use a variety of things to collaborate
- Git and GitHub are great for collaborative projects, but not everyone will be willing to use
- Word documents with track changes or Google Docs work
- Overleaf can be used for collaboration on writing papers,
  - Online LaTeX editor
  - Can create presentations with collaborators
- Have to understand how to work with people who are less technically advanced

### **How to learn bash scripts?**

- Getting started resource: <https://linuxconfig.org/bash-scripting-tutorial-for-beginners>
- Google-ing and using StackOverflow will be helpful with learning scripting
- Make yourself a cheat sheet

- *Computing club may also have an event discussing basic terminal commands*

### **How do Mac users download SAS?**

- Make sure to use your license key on the device you are going to use, since you only get one
- Can use SAS through Virtualbox or Parallels
- Can download Parallels for a discounted rate through Columbia IT

### **How do you take notes? If by iPad/tablet, can you speak about useful apps for taking notes, annotating a textbook, etc.?**

- Notability (mentioned above)
  - Automatically does text conversion, can search for a word in the app
  - Can use it as a notebook
  - Can download and annotate textbooks
  - Con: can't split screen with two Notability windows on the iPad
  - Can split screen with Notability and Books for notes and textbook
- MarginNote (<https://www.marginnote.com/>)
  - Provides good organization for textbooks
- For non-iPad users:
  - Can keep things organized in Google Drive for classes
  - Print out slides and annotate them during class, keep organized in binder
  - Can use pen and paper and then write up as a LaTeX document later

### **What advice do you have for organizing files/folders on your computer?**

- Focus on consistency and organization for whichever system you use
- Try not to procrastinate with organization because it gets difficult as time goes on
- Standardize directories across courses or projects
- Starting a filename with YYYYMMDD makes chronological sorting easier
- Input assignments and due dates into a Google Sheet to prioritize

### **How do you keep track of references when writing a paper?**

- Zotero (<https://www.zotero.org/>)
  - Useful for keeping track of references and generating citations in Word
  - Can have a shared reference library for collaboration
- Google Scholar (<https://scholar.google.com/>)
  - Create an account
  - Allows you to favorite documents and return to them later
  - Can use even when you are not connected to Columbia's network

### **What is everyone's preferred naming convention?**

- Snake case (underscores\_between\_words)

### **How do you keep track of Zoom links and passwords?**

- Put links and passwords in "notes" or "details" section of the event on your calendar

- You can do this for in-person classes too (write office or classroom number)
- Can subscribe to other calendars and create multiple personal calendars in Google Calendar
- Can export calendars from CourseWorks to your personal calendar