

Now that you have gotten a good start with your annotated bibliography, we want to start work on the paper, while you simultaneously start to work on your application / simulation (whichever you picked).

The next items due for the project are:

- Draft of the exposition part of the paper – due Friday 11/18 by midnight to Gradescope (and repo)
- Update I – due Friday 11/18 by midnight – this is an issue you create in your repo (see project assignment)

Today we want to focus our discussion on getting started with the whole paper, with some focus on the exposition.

We'll set forth main tasks for the day that you can work on in any order (though tackling the outline first is probably wise), and which should help you get going.

**Task 1: Outlining**

Review your synopsis. Are there natural “sections” to your paper based on what you proposed?

Start to draft an outline based on what you proposed. Don't forget the references will be listed at the end of the paper.

**Task 2: Aligning**

Consider your synopsis and what you have suggested as the parts of your exposition / background section. Align your references with this ordering. Are you missing sources for any part of the section? Is there one set of notation you want to settle on for the section? (This is wise).

If you find “holes” in the alignment, you can continue your literature search.

**Task 3: Application or Simulation**

Get to work on your application or simulation. For applications, it's wise to get your data and make sure you can get it into R in a somewhat wrangled fashion before too much time passes. Similarly, for simulations, writing a paragraph about what you want the simulations to show and brainstorming the setup / outline including the parameters you plan to explore different values for can be very useful.

**Task 4: SMART Goals**

As we look ahead to the coming weeks, class time is devoted to the projects, but you will still need to work on them outside of class. Thinking about this and common issues people encounter, I want to

encourage you all to set SMART goals when you have time to work on the project, rather than simply saying “Oh, that’s an hour I’m going to work on the project.”

What are SMART goals?

- S – Specific – You know exactly what the goal is. Instead of “write exposition” you’d say something like “write 2 paragraphs in exposition on XXX and 1 paragraph on YYY”
- M – Measurable – You will know when it’s complete.
- A – Attainable – It’s something you can do (in the timeframe).
- R – Relevant – It’s something worthwhile for the project. (To try to keep you focused).
- T – Timely – It will fit in your timeframe. This is to encourage you to not try to force a three hour task into a 1 hour session. (This can be hard to judge, just know that even for faculty, what time we estimate something will take is often  $\frac{1}{2}$  or  $\frac{1}{3}$  of what it ends up taking.)

There are other variants of this out there, but this is the one I’ve worked with in the past.

I encourage you to try this a few times. If you set a few SMART goals for your week working on the project, or even just one at the start of our class period, you’ll find it very satisfying to be able to say “I did that!” rather than keep broad general goals like “write exposition section”.

Why is this here as a task? It may help some of you to track the “pieces” of the project – the exposition and application/simulation, by always keeping a SMART goal handy for each piece, so you can work on a fresh task if you find time or get stuck on another part. Alternating between coding and writing can be a useful strategy. You don’t want to do all of one before the other. (Even though I’m having you turn in the draft exposition – you should be drafting the other sections or working on the analysis that will go into them, too!)

So, this task is to brainstorm a few SMART goals for each “piece” of the project (based on where you are now), to keep handy for yourself as you work.