

**CMPSC 580
Junior Seminar
Spring 2019**

**Assignment 2:
An Area For a Senior Thesis Proposal
GoogleDocs for Submission**

Starter Link for Google Docs

<https://goo.gl/forms/inf0Q9xtPPPUWa0L2>

Part 1: An Area of Interest

In computer science, many ideas are actually a mix of ideas from many different directions. For instance, in bioinformatics, ideas for research originate in computer science, the mathematical sciences and biology, and so solving problems and finding solutions is actually a task done by investigators who are exposed to many different types of thinking. These ideas were likely found by investigators who spent a moment to read through articles that were linked to the project's keywords.

In this exercise, you are to answer (in writing) several leading questions which have been designed to help you to find out more about your specific area(s) of interest. To learn about what an area has to offer, and about the directions of its research, you will be reading through primary source articles from online repositories such as Google Scholar (<https://scholar.google.com/>). After you have found relevant articles and have spend some time to read through their abstracts and other material as necessary, complete the questions at the Google form link above.

Be sure to think about what you *love* about an area that you *like*.

What To Do

Go online to sites that offer articles to read from your interest area such as `scholar.google.com` to type a general keyword from your interest area. Look through the articles to get more ideas. Keep a note of these ideas for when you complete your leading questions in the Google Docs form (using the link provided above).

In your Google form, your questions will be the following.

1. What *was originally* your interest area?
2. What *is now* your interest area?
3. What were your keywords that you used to find *relevant* articles?
4. What kinds of *important articles* (based in academia or industry) did you find from this search to give you a better view of where you would like to start a project?

5. Describe two of the most exciting works that you found in a few sentences. Please include the article's references. Note, these references can be found by clicking on the "cite" link in Google Scholar.
6. What were the research questions (in general terms) behind each of your two selected articles from above?
7. What different area(s) were combined to find solutions to the research?

In the next part, you will be introducing your narrowed-down interest(s) from your research to the class during a lightning-talk of three minutes.

Part 2: Lightning Talk and Slides

For Thursday's class, prepare a "lightning talk", lasting about 3–5 minutes, together with several accompanying slides (written in a software of your choice), in which you expand upon your narrowed-down area of interest. Remember, you do not need to know exactly what your research project will be. This assignment is to help you narrow-down a larger idea to a smaller one.

What To Do

For your talk, please respond to the following questions. Remember you will have only three minutes in your talk and so you will have to be brief.

1. What *was originally* your interest area?
2. What *is now* your interest area?
3. What types of articles did you find to help your narrow-down your interest area?

Help?

Please let the instructor know of any questions that you may have. Please use email or make office-hour appointment slots if you would like to discuss an issue.