Literature Survey Process

- Done in groups: your research project group is likely ideal
- **Step 1**: Pick 3 or more research papers
  - Broadly related to your research project
- **Step 2**: Send me the list of papers with links to pdf copies (by Sunday, November 11)
  - I need to approve the 3 papers
  - We will iterate to ensure convergence on the list
- **Step 3**: Prepare a 2-page writeup on the 3 papers
- **Step 3**: Prepare a 15-minute presentation on the 3 papers
  - Total time: 15-minute talk + 5-minute Q&A
  - Talk should focus on insights and tradeoffs
- **Step 4**: Deliver the presentation in front of class (dates: November 26-28 or December 3-7) and turn in your writeup (due date: December 1)
The goal is to

- Understand the solution space and tradeoffs
- Deeply analyze and synthesize three papers
  - Analyze: **Describe individual strengths and weaknesses**
  - Synthesize: **Find commonalities and common strengths and weaknesses, categorize the solutions with respect to criteria**
- Explain how they relate to your project, how they can enhance it, or why your solution will be better

Read the papers very carefully
- **Attention to detail is important**
The talk should clearly convey at least the following:

- **The problem**: What is the general problem targeted by the papers and what are the specific problems?
- **The solutions**: What are the key ideas and solution approaches of the proposed papers?
- **Key results and insights**: What are the key results, insights, and conclusions of the papers?
- **Tradeoffs and analyses**: How do the solutions differ or interact with each other? Can they be combined? What are the tradeoffs between them? This is where you will need to analyze the approaches and find a way to synthesize a common framework to describe and qualitatively compare & contrast the approaches.
- **Comparison to your project**: How do these approaches relate to your project? Why is your approach novel, different, better, or complementary?
- **Key conclusions and new ideas**: What have you learned? Do you have new ideas/approaches based on what you have learned?