

## Graph Mining Project Proposal

Submit presentation slides to Submitty by February 19th

v1.0: Last Updated February 11, 2026

Project proposal presentations will be on Tuesday February 16th and Thursday February 18th. Basic details are below:

1. Groups of 1 or 2 people max.
2. 10 minutes maximum for undergrad presentation. 25 minutes maximum for graduate presentation, with 15 minutes for the lit. review.
3. Be ready to present on Tuesday. Order will be randomized.
4. Submit your presentation to Submitty Gradeable by Friday the 19th. There will be a separate Gradeable for graduate students.

There's a few expectations for what to include in your project proposal presentation. Below are some details. Try to address every point:

1. **What graph-based problem is being considered?** You should come up with a topic that is relevant to something under the umbrella of graph mining, graph processing, graph analytics, or graph visualization.
2. **What data are you going to be using?** Make sure you're as specific as possible. Some problems are impossible without access to certain types of data. Be sure to validate the data you intend to use actually exists in the public domain.
3. **What algorithms and code is going to be implemented?** Think of the implementation details and requirements for the problem+data being considered. Your project should not be trivial nor exceedingly-nontrivial in terms of implementation requirements. A reasonable estimate (if possible) would be around a few hundred lines of code and 20 hours of work per person in total.
4. **What are the expected outcomes?** Consider what the end goal or result of the project will be, and how you will you know if you've achieved this goal or not.
5. **How will work be distributed?** If you're in a group of multiple people, come up with a tentative work distribution scheme to ensure fairness. This is also useful to have explicitly writtent down if one person doesn't do their share and it affects the work of the entire group.
6. **Are there any potential challenges?** Think about what the largest potential issues might be with your implementation, data access or parsing, computational overheads, etc. and how you could address them.