

Please submit your solutions to the following problems on Gradescope by **6pm** on the due date. Collaboration is encouraged, however, you must write up your solutions individually.

1) Final Project Proposal. Select a *method* or *problem* to study for your final project, following the guidelines on the course repository. Please submit a two paragraph proposal that includes:

- (a) A brief description of your topic, identifying a method or problem of choice (in plain language, no math needed unless you find it helpful). You may want to include your own motivation for choosing this topic.
- (b) Three peer-reviewed resources that can serve as a starting point for your self-study. These could be a textbook, a monograph, a review article in a reputable journal, etc. Informal resources such as blogs and online forums will *not* be counted.
- (c) A preliminary description of a problem (if you are focusing on a method) or a method (if you are focusing on a problem) that you can use for the “application” requirement in your report, with an explanation of your choice. For example, “why is this problem suitable for your method of focus?”