

CS 510 Qualifying Exam Essay Questions

Instructions: Please answer these questions to the best of your ability. Include in-text citations and references where appropriate. No length minimum or maximum, write just enough to answer the prompt without extraneous text. Answers to these questions are due at the end of the exam period.

Reminder: this is an individual evaluation, you are not give or receive help from another person in completing this exam.

Essay Prompts:

1. List and explain three of the “R’s” of open science and how they apply to computational science. Rank these R’s according to which you think are most important (at the top) to least important and describe your reasoning. Be sure to use references where appropriate to back up your ideas.
2. What are the three most important best practices that you’ve learned from the course? Be sure to cite a source for the practice. Explain what the best practice is what it is intended to prevent or avoid, and why it is most important for you or why you find it especially useful. Note: this is not asking about best practices *in general* but the best practices for you at your career/coding stage.
3. Describe the benefits and drawbacks to open science. Discuss at least two benefits and two costs. Support your arguments with references.