

CPSC 527, Fall 2015, Practice final exam

This is a take-home final exam. You must work alone. For each question below I provide instructions on (1) the expected format of the answer, and (2) the resources you may or may not consult for your answer. You must follow these instructions and your answer must be your own. Answers that are particularly creative, elegant, and to the point are encouraged. All questions regarding the exam must be sent directly to the instructor by email who will respond in a best-effort manner. Exam answers must be emailed to instructor in pdf format as a single attachment.

Question 1 of 1:

Respond to the following design prompt with an essay that is max 2000 words in length¹. You may use any resources you can find (open book).

First, select one of the following three topics: (a) naming, (b) routing, (c) security. Then, select a paper from our schedule this term that (1) describes and evaluates a networked system, and (2) does not relate directly to the topic from the first step. For example, it is not okay to select a security/privacy paper if you selected security as your topic. But, it is okay to select a middlebox paper for the security topic.

[Q1.A: 50/100 points] Identify and describe **one** non-trivial **technical** issue that relates to the topic and the paper you selected that has **not** been discussed in much detail (or at all) in the paper. This description must be complete (i.e., it should be clear why it is an outstanding issue, why it is non-trivial, and why a technical solution will resolve this issue).

[Q1.B: 50/100 points] Sketch out a solution that leads to a resolution of the issue that you identified, **without** compromising the contribution/argument made by the original paper. A good sketch would include high-level design criteria, such as requirements and assumptions, and must cogently argue why it leads to a solution of the issues.

¹as reported by wc -w