Spring 2022 Software Engineering Qualifier Writing Prompt

The following writing prompt has two parts. You are to turn in a single PDF file created using standard LaTeX article style at 11 points with the following specification to set the page size and margins:

\usepackage[letterpaper, margin=1in]{geometry}

Part 1: Select about 5 or 6 papers from the reading list that you feel are most relevant to what you will write in Part 2. You may add one or two papers from outside the reading list if you like. Summarize the papers, and point out the relevant parts that you will use in Part 2. This should be about 2 $\frac{1}{2}$ to 3 pages long.

Part 2: Adopt a position on the issue of how well CS academic departments are training students to properly test software. Examples of positions that you might take:

- CS departments are currently doing a great job. As they graduate students over time, they are causing a rise in the quality of testing in industry as graduated students bring with them from academia better testing practices.
- CS testing pedagogy used in some CS departments is successful, and CS academic training related to testing would be fine if the other CS departments would just all get up to speed with best practice.
- CS departments don't do a good job now, but if we would overhaul CS testing education to adopt a range of known industry best practices, then things would be better.
- CS academic departments are not the right place to be teaching industry-appropriate software testing skills.

These are just example position statements, you can take one of these or adopt another position statement. But you should adopt a single position, and make the most persuasive argument that you can for it. (No "On the one hand… on the other hand…". Argue for one position.) Be sure to draw on the appropriate literature (from Part 1) to support your argument. Feel free to include a future research proposal component, or a policy implementation component if that seems appropriate to your position. This part should be about 2 ½ to 3 pages long.

In addition, you should provide a reference section for the papers that you reference.