

Seven Key Questions

During your academic training and professional career you will produce many types of research communication (abstracts, papers, presentations, posters). Before you begin to prepare these documents or presentations, however, you need to think through the project as a whole. If you first write the answers to the Seven Key Questions listed below and then discuss them with other students and your advisor, you will save time and produce clearer and more persuasive presentations and papers. Note: Answers may overlap. Contribution may signal importance and may also identify what is NEW, for example.

1. Focus / Specific Problem Your Research Targets

What did you identify as work that needed to be done; on what specific problem does your research focus?

2. Importance

How is your work important? Why should other computer scientists and people who work in related fields care about your contribution? What are the broader impacts of your research?

3. Context

Have others attempted to address the problem before? What has been discovered, and what are the issues/problems that still need to be investigated? In other words, what previous work do you build on, extend, generalize, test, improve, or apply to new circumstances?

4. Method(s)

What method(s) did you choose to address the problem? Why this choice rather than other possibilities? Defend your choice(s). (Saying that your advisor told you to use this method is NOT a sufficient answer! You must know why your method is a good and appropriate choice.)

5. Results

What, specifically, are your findings? If you do not have any results to report at this time, what results do you anticipate?

6. Unique Contribution

What is the significance of your research findings? What are you reporting that is NEW? How does your work fit into other work that has been done in your field? You **must** differentiate your contribution(s) from those of other researchers.

7. Possible Applications / Future Work

In what ways might your work be useful, either theoretically or practically? What future research might grow out of this research project?