Individual Meeting 2
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ICS 698-02
Spring 2021
April 27, 2021
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Contents

1 What is the status?

1.1 What has been completed?

I have developed a simple example and workflow for getting started using a quantum computer. The paper has a demonstration of how to build a quantum

circuit and how a quantum circuit can modeled with an intermediate representation (QASM). It is shown how to use the quantum framework in a well known programming language (python). Finally I have mapped out the workflow that takes you through the execution of a quantum code. I have some basic assessment of creating a quantum program using classical computing.

1.2 What has been not been completed and why?

Several of the building up assignments are still not done. The thesis reviews are incomplete as these take so much time to read. The final slides are not turned in but there will not be many changes from the draft slides. The last research report is also not done. Mostly the problem I have is balancing my work and school to get stuff done on time. For a class it is less of a challenge to learn some material and prepare for a test, whereas writing requires more time.

1.3 What are the challenges for you to complete the term paper or what else you would like to add to the term paper if more time is given?

With more time I would like to improve the transitions in the paper from one section to the next as right now each thing is not always clear how it fits into the main idea for the paper. I would like the paper to be more focused. I would like to extend the mathematical treatment in the literature review and background section.

2 The assessment of your research work

2.1 What have you learned unexpectedly from doing this term paper and why?

I believe the ideas become more clear only after you try to write them down. It is easy to think of some plan, but the plan goes out the window once you start writing.

2.2 what is the brightest aspect of your term paper and why?

I believe the brightest aspect of the paper is the implementation of some quantum code. This is a new paradigm in computing and we can see the "Hello world" program for a quantum computer.

2.3 What is the toughest part in writing the term paper and why?

The toughest part is trying to explain how the work is original or in coming up with an original take on the subject.

3 Your expectation for the future

3.1 Are you expecting to use the result of this term paper as a step stone for your MA thesis or project, why or why not?

Yes I plan to do my thesis on this topic and will be looking at what I have already done to help me focus for a thesis or project.

3.2 What are the things you are still wondering in terms of finding a topic for your MS thesis or project? Please explain briefly

I am most concerned about finding a faculty member that will work with me. I know there are some faculty interested in machine learning and there is application of quantum computing to machine learning so maybe I can try some project in that area.

3.3 What do you wish to have from the department and university to enrich your study and research with our MSCS program

I hope I can find an advisor. I am also interested in finding out if after I complete the program if there is any room for me to find a community faculty position teaching an introduction to quantum computing. What does the path to community faculty look like?