# Group Work

Nov 3, 2019

We met as a group to work on our Technical Lightning Talk and version 2 of our design document. Given that we changed the end goal of our project in the last couple weeks, we had much more to edit in this design document than we had originally planned. A lot of sections discussing our design and requirements needed to be completely updated. At first, section 2 didn't have too much information, but for this version we were able to implement a ton of new information about what our design will be. We were also able to provide a graphic of all the gates we will need to implement. Our group believes that this change in our project goal was very helpful, and it's obvious that this goal is much easier to grasp than the original decomposition algorithm. We plan on meeting this coming tuesday to start coding for our new project

## Individual Work

Calista Carey

#### Hours Worked: 5.5 hours

I watched CMU video lectures 3 and 4. I also set up the environment I will be working in. This is a Linux VM that I will be using to develop the project in. While editing Design Document v2, I updated section 1.3, 3.3, 3.5, 3.7, 4.1, 4.2, 4.3.

Austin (AJ) Hanus

#### **Hours Worked: 5 hours**

This week, I watched the CMU lectures for 3 and 4. I also worked on the Design Document and recorded our Lightning Talk. I also updated my Cirq fork so that everyone can clone my fork and work together on our objectives. I also read more about the QUIL formatting language and how we are going to output Cirq to QUIL.

Andrew Hancock

### Hours Worked: 6

This week I have been watching more lecture videos from the Quantum Information course at CMU. I have also updated the problem and project statement in version 2 of our groups design document. I have also updated section 2 which describes our proposed design. In terms of development, I have been researching how exactly we will translate Cirq to QUIL in terms of syntax, what's supported and what's not, and the general structure of how QASM currently implements translation.

## Austin Garcia

This week I watched two more CMU lectures as well as completed setting up my ubuntu virtual machine. I ran into some more technical issues with setting up my virtual machine but managed to complete the setup. I also continued gaining familiarity with QUIL and QASM.

## Jordan Cowen

This week I have been watching more CMU lectures on quantum computing in order to gain the technical skills necessary for our project. I have also worked on revising our design document to reflect our changed project. I have contributed to the GitHub markup design document for our project by adding supported conversion requirements from cirq components to quil.

#### **Hours Worked: 7**

I continued to research QUIL and find the commonalities it shares with Cirq. As well, I worked on updating section 1.6 and 6 of the design document with our new project goals. I plan to look more into the current qasm\_output.py file for some good direction.