

sdMay23-24 Quantum Computing

Aug 2022 - May 2023

Early / Mid March Report

Team: Quantum Computing

Goal: Create a kilo-qubit scale (KQB) **design** for a quantum computer

Team Members:

- Nicholas Greenwood
- Jacob Frieden (Gone due to Wifi Issues)
- Emile Albert Kum Chi (Late due to Wifi Issues)
- Colin Gorgen
- Arvid Gusatfson (Gone due to Wifi Issues)
- Sam Degnan

Advisors:

- Gavin Nop (PhD student) (Gone due to Conference Presentation)
- Dr. Jonathan Smith (Gone due to Wifi Issues)
- Dr. Durga Paudyal

Agenda: Virtual Meeting

- Software Side Updates
 - Jacob
 - Arvid
 - Sam
- Hardware Side Updates
 - Nick
 - Emilie
 - Colin
- Practice Presentation

Summary

- Weekly meeting summary, **including accomplishments, pending issues, and individual contributions**
 - After 20 minutes and consistent wifi issues for those on campus, we ended up scrapping the meeting
 - For contributions during previous weeks, please refer to our website, where we have three existing status reports
 - We talked about the strategy of the video presentation due on Friday and the layout of the slideshow we had created for the recording
 - Software team met on Monday and worked more with Qiskit and making the digital twin
 - Published software to our Github repo, refer to that for individual software changes

- We did not get to discuss pending issues this week due to half of the team being gone and cutting the meeting early

Name	Contributions	Weekly Hours	Total Hours
Nick	Slideshow shell, Looked into ancillary hardware	6	65
Emile	Worked on component spacing	6	65
Colin	Continued with Solidworks model, inputted info into our slideshow	6	65
Sam	Worked on Qiskit digital integration, Github setup, Worked on slideshow slides	6	65
Jacob	Worked on Qiskit digital integration, Github setup, Worked on slideshow slides	6	65
Arvid	Worked on Qiskit digital integration, Github setup, Worked on slideshow slides	6	65

- Please note: We have not been keeping track of weekly or cumulative hours before this point of the semester. It seems very micro-manag-y and is not how we like to work. The only reason we have this table in here is to appease course requirements. All numbers are estimates.

- List of any decisions made
 - Everyone needs to talk about at least one slide during the video presentation
- Next steps for the project / Plans for the coming week(s)
 - Film and submit video presentation during the back half of this week
 - Emilie will work on his slide, or we will incorporate it into existing hardware slides. Deck is already pretty long, and we may have trouble getting through it all in the allotted time
 - Continue to work on our respective parts