Cohort Project update

Cohort 4

## Cohort Project update

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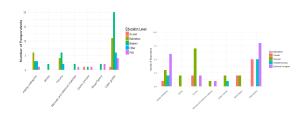
Quantum Engineering CDT University of Bristol

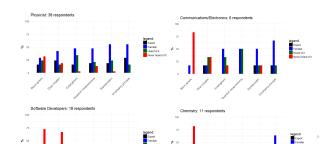
May 22, 2018

# Survey results pg 1

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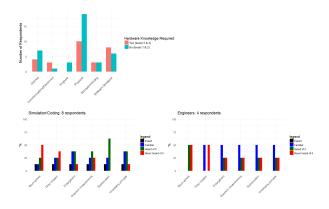




### Survey results pg 2

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#### Sections we plan to include

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```
Quantum Meta-Programming for Dummies
          Quantum Engineering CDT
            University of Bristol
             May 11, 2018
1 Preface
This is where the preface will be
Contents
1 Preface
2 Introduction
 2.1 Why you should be interested in quantum computers
 2.2 What are quantum computers
 2.3 Traditional computers shortcomings & quantum supremacy.....
 3.1 Quantum Circuits
  4 Short term quantum computing
 4.2 Rigetti-Forest
  4.2.1 Example Codes
 4.3 IBM- Project Q
  4.3.1 Example Codes
5 Algorithms and applications
 5.1 Quantum transforms
  5.2.1 Shor's algorithm 11
5.2.2 Discrete Logarithm problem 11
```

```
6 Programming a future universal quantum computer
6.3.1 Language 1
6.3.2 Language 2
7.1.2 Low level classical languages
7.2.3 What are the operations?
7.2.4 Putting it all together
7.5 Quantum compilers and high level languages
```

Figure: Document at https:

//github.com/ot561/qprogramming/blob/master/main.pdf

## Running code on a physical quantum computer?

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A few people have run a quantum algorithm on Rigetti and IBMs hardware via the cloud.