Pre-Course Survey

This survey should take ~5 minutes. Please fill out this form to help us understand where students are starting the Introduction to Quantum Computing class so we can do our best to support you and improve future programming.

First Name *

Riya

Last Name *

Tyagi

Student ID

Check your email for this. It should have been sent to you.

NOTE: If you cannot find your ID, please try to add a '_' between your last name and the number. For example, if my ID was 123Pel, I would try 123_Pel.

If you still cannot find your ID, check the box below and fill in your ID below.

+ Add

If you cannot find your Student ID in the question above, please check this box.

☑

If you have been sent your Student ID, write it below.

12410_Tyagi

Email Address *

pialityagi@gmail.com

Did you participate in The Coding School's summer quantum computing camp for high school students? *

- Yes
- No

Did you participate in IBM's Qiskit global summer school? *

- Yes
- No

Have you participated in any other quantum classes or formal programming before this course? *

- Yes, I have significant training
- I have some training
- No, this is my first

Do you know what quantum computing is? *

- Yes - I have an advanced knowledge of quantum computing

- Somewhat- I have an intermediate knowledge of quantum computing
- No- I have a very beginner knowledge of quantum computing

Do you believe quantum computing will have a significant impact on technology and other fields, like security, health care, and more? *

- Yes
- No
- Unsure

Which companies do you know of that provide quantum computing services?

DWave, IBM, Rigetti, Baidu, Azure Computing

Which universities do know of that have strong programs for quantum computing?

MIT, Harvard, Caltech, Stanford

Multiple Choice: What is quantum computing? *

(a) Simulating quantum mechanics on modern computers.

(b) Making use of the weirdness of quantum mechanics to solve problems that normal computers cannot.

(c) Injecting quantum mechanics into classical computers to increase their computing speed.

(d) Using computers to discover new laws of quantum physics.

(e) I don't know

- (a)

- (b)
- (c)
- (d)
- (e)

Multiple Choice: Which of the following does NOT describe a qubit? *

(a) The outcome of a quantum algorithm.

(b) The basic unit of quantum information.

(c) The quantum analog of a classical bit.

(d) A two-level/state quantum mechanical system.

(e) I don't know

- (a)
- (b)
- (c)
- (d)
- (e)

How confident are you in your knowledge of STEM? (science, technology, engineering, math) *

- 1- Very confident
- 2- Somewhat confident
- 3- Not very confident
- 4- Not confident at all

How confident are you in your knowledge of quantum computing? *

- 1- Very confident

- 2- Somewhat confident
- 3- Not very confident
- 4- Not confident at all

On a scale of 1 - 4, do you agree or disagree with the following statement: I believe I will be able to do advanced quantum computing in the future *

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

I think I could handle difficult quantum computing problems *

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

I am good at quantum computing *

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

Quantum computing makes me nervous *

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

Quantum computing is difficult *

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

I feel comfortable in my quantum computing skills *

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

I believe I will get a good job if I learn quantum computing *

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly Agree

I will use quantum computing in many ways throughout my life *

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

Quantum computing is of little relevance to my life *

- 1- Strongly disagree
- 2- Disagree
- 3- Agree

- 4-Strongly agree

I feel like I "belong" in quantum computing spaces *

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

I consider myself a scientist, coder, or technologist *

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

I have computer science or quantum computing mentors *

- 1- Strongly disagree
- 2- Disagree
- 3- Agree
- 4- Strongly agree

Have you used IBM's Quantum Experience or Qiskit before? *

- Yes
- No
- Unsure

What is your opinion of how significantly quantum computing will change important sectors, like cyber security, healthcare, and technology? *

- Quantum computing will have a major impact in our lifetimes
- Quantum computing will NOT have a major impact in our lifetimes
- I don't have enough information about its potential impact to know

Are you interested in pursuing a career in STEM in the future? *

- Yes, definitely
- Maybe
- Unsure
- No, not interested

Are you interested in studying quantum computing in university or pursuing a career in quantum computing? Check all that apply.

I am interested in:

- [ ] Studying quantum computing in university or graduate school
- [ ] Pursuing a career in quantum computing
- [ ] The intersection of quantum computing and another field
- [ ] I am not sure if I am interested in studying or a career in quantum
- [ ] No, I am not interested

Why did you apply for this course? *

Select all that apply.

- [ ] I take as many courses in quantum computing as possible.
- [ ] I've never had the chance to learn about quantum computing before.
- [ ] I couldn't find other classes in quantum computing.
- [ ] I am currently doing virtual learning due to COVID-19.
- [ ] I have free time because of COVID-19.
- [ ] I am looking to transition careers and want to new skills.
- [ ] I was excited to be taught my MIT and Oxford researchers.
- [ ] I wanted to take a class that IBM was involved with.

- [ ] I've participated in past TCS programming.
- [ ] The course was free.
- [ ] I don't usually have access to high-quality educational opportunities.
- [ ] I know someone taking the class and they told me to apply.
- [ ] My teacher or mentor encouraged me to apply.
- [ ] I want to earn a certificate from completing the course.
- [ ] I think this will make me a more competitive college applicant.
- [ ] I think this could help me earn a promotion at work.
- [ ] The class sounded fun.

Please share any other reasons for why you applied to be in this course.

Please write three goals you are trying to achieve from the course: *

1. Improve my knowledge of quantum computing.
2. Gain mentors and a likeminded group of peers with whom I can work on quantum mechanics.
3. Find means through which I can conduct deep research in quantum computing, specifically cryptography.

Would you have been able to participate in this course if it were not free? *

A course like this would cost about $700 for the full year on average.

- ( ) No, I would not have been able to afford it
- ( ) Maybe, but it would have been a financial sacrifice
- ( ) Yes, I could afford to pay to take the class
- ( ) I could afford to pay, but I probably would not have been interested

Please mark any of the following you would be interested in participating in:

Select all that apply.

- [ ] Q&As with quantum scientists
- [ ] Mentorship by a quantum researcher
- [ ] Participating in a research project with other students
- [ ] Workshops on quantum computing
- [ ] Connections with others from your same demographic community

Would you be interested in taking a more advanced quantum computing course after you complete this one?

- ( ) Yes
- ( ) Maybe
- ( ) No

Clear selection

Is there any other quantum programming (i.e. workshops, conferences, panels, camps) that you'd be interested in us developing?

We welcome your ideas!

I would love to be part of/help develop quantum hackathons - in which quantum stude

Comments/Questions

(Optional)

Submit