

CERTIFICATE OF COMPLETION

This is to certify that

Akshara Thakur

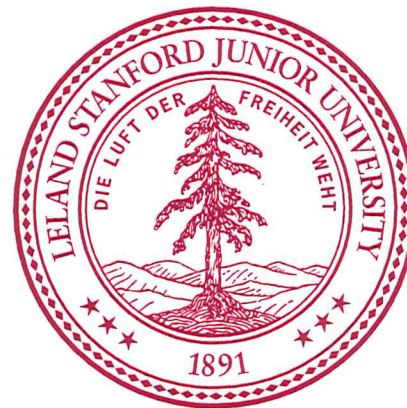
has completed

Stanford Pre-Collegiate Summer Institutes

in

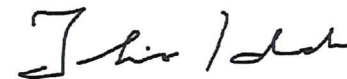
Quantum Computing

at Stanford University



July 23, 2021

Date



Tomohiro Hoshi, Ph.D.
Head of School, Stanford Online High School

Akshara Thakur has completed the 2021 Stanford Pre-Collegiate Summer Institutes course in

Quantum Computing

from July 12, 2021 to July 23, 2021, online with Stanford University. Akshara's admission into the Stanford Pre-Collegiate Summer Institutes, participation in and successful completion of the program, demonstrate a high level of academic ability and intellectual curiosity.

Course Description:

Quantum computing, leveraging quantum mechanics to make particular computational algorithms faster, is a rapidly growing field. In the past year there has been a growing demand to educate the next generation "quantum workforce." This course is intended as an elementary introduction to the field of quantum computing. Just enough quantum mechanics and mathematics will be introduced to lay a conceptual framework and provide a sophisticated understanding of what the promise, and the hype, quantum computers may provide. Different quantum circuit simulators will be utilized to construct the core quantum algorithms and to run simple problems on an actual quantum computer.

Student Evaluation (from Instructor):

Akshara was a central element of the intellectual discussion in this course. Indeed, she asked probing and sophisticated questions throughout the two weeks in both the main session and during optional office hour sessions. Akshara's desire to delve deeper into the mathematics of entanglement allowed clarifying discussions that benefitted the whole class. For the assigned problems Akshara submitted excellent work for all sets. I am confident that Akshara now has an excellent foundation in quantum computing and the mathematics of qubits in Hilbert space. I hope that Akshara uses this course as a springboard into deeper explorations of quantum theory and computation -- she is well prepared for it. Well done.

Sincerely,



Gary Oas