India's leading educational institutions collaborate with IBM on quantum computing education

IBM to provide access to quantum computers and assist in teaching courses

Bangalore, 25th May 2021: IBM (NYSE: IBM) today announced that it will allow over-the-cloud access to its quantum systems for top-tier institutions of India to accelerate advanced training and research in quantum computing. The faculty and students of Indian Institute of Science Education & Research (IISER) - Pune, IISER – Thiruvananthapuram, Indian Institute of Science (IISc) Bangalore, Indian Institute of Technology (IIT) - Jodhpur, IIT - Kanpur, IIT - Kharagpur, IIT – Madras, Indian Statistical Institute (ISI) Kolkata, Indraprastha Institute of Information Technology (IIIT) Delhi, Tata Institute of Fundamental Research (TIFR) Mumbai and the University of Calcutta will be able to access IBM quantum systems, quantum learning resources and, quantum tools over IBM Cloud for education purposes. This will allow them to work on actual quantum computers and program them using the Qiskit open-source framework.

The collaboration will be part of the [IBM Quantum Educators program](#) that helps faculty in the quantum field connect with one another and provides them with resources to enable quality educational experiences. The program offers multiple benefits like additional access to systems beyond IBM's open systems, pulse access on the additional systems, priority considerations when in queue and private collaboration channels with other educators in the program.

IISER- Thiruvananthapuram, ISI-Kolkata, and IIT-Madras will host Quantum Computing Lab courses for their advanced undergraduate and postgraduate students. These courses will include lab sessions using IBM quantum systems.

The University of Calcutta has been awarded an IBM Quantum Researchers Program Access Award for a project led by researcher Mrityunjay Ghosh under the guidance and supervision of Dr. Amlan Chakrabarti, Professor and Director of A.K. Choudhury School of IT, University of Calcutta. This marks the first IBM Quantum Researchers Program Access Award made to a student or faculty at an Indian university.

Gartner predicts that 44% of enterprises expect quantum to have a substantial impact on businesses in the next 3-5 years. A survey from BurningGlass Technologies notes that the demand for quantum skills is expected to grow 135% in the next five years. Some of the institutions currently offer theoretical courses in quantum computing which they can now upgrade to include practical training, lab sessions. An estimated 100 – 150 students are expected to benefit from this engagement that enables them to do advanced projects, work on algorithms, and use cases every year.

"Quantum Computing is a paradigm-shifting technology that can power countless innovations in the future. By providing access to our systems over cloud, IBM is enabling India's brightest minds to learn the skills to prepare for this disruptive future. IBM is committed to growing a quantum-ready workforce and building an ecosystem to nurture the quantum community in India. With this engagement, we can take it a step further to scale up this ecosystem in India, for India and the world," said **Gargi Dasgupta, Director, IBM Research India & CTO, IBM India/South Asia.**

About IBM India

For more information on IBM India, please visit http://www.ibm.com/in/en.

For the latest annual corporate responsibility report describing IBM's leadership and accountability in how it collaborates with communities, clients, governments, shareholders, employees, and not-for-profits on environmental, social service, and governance issues, please visit here. Follow IBM's corporate social responsibility initiatives by following @IBMorg or visiting www.IBM.org.

About IBM Quantum Researchers and Educators Programs

Read more about the Researchers Programs here: https://www.ibm.com/blogs/research/2020/07/quantum-researcher-program/
Read more about the Educators Programs here: https://www.ibm.com/blogs/research/2020/07/future-quantum-workforce/
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