

# 'Indian Developers to benefit from IBM's quantum computing breakthroughs'

**IBM's commitment to advancing and accelerating quantum innovation in India, IBM India recently signed an MoU with the Ministry of Electronics and Information Technology (MeitY) to collaborate with The Centre for Development of Advanced Computing (C-DAC)**

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Indian Developers will benefit from IBM's quantum computing breakthroughs, said IBM on Thursday.

"India has one of the largest contingents of IBM quantum computer users in the world. It highlights that active Indian developers are well-positioned to reap the benefits of advancements in quantum computing hardware," the company told *The Hindu*.

IBM unveiled its most advanced quantum computers to date. This Quantum Heron-based (a 133-qubit tunable-coupler quantum processor created by IBM) systems now support circuits with 5,000 gate operations—doubling last year's benchmark and delivering results 50 times faster, reducing runtime from 112 hours to just 2.2 hours, claimed Big Blue.

Jay Gambetta, Vice President, IBM Quantum said, "Advances across our hardware and Qiskit are enabling our users to build new algorithms in which advanced quantum and classical supercomputing resources can be knit together to combine their respective strengths."

Qiskit is the world's most popular software stack for quantum computing and it was founded by IBM Research to allow software development for their cloud quantum computing service, IBM Quantum Platform.

Available on the cloud now, these breakthroughs bring IBM closer to error-corrected quantum systems, targeted for 2029, the company said.

According to the tech giant, these advancements would push quantum computing beyond classical limitations, accelerating the journey to "quantum advantage" fuelling new scientific value and progress towards quantum advantage.

As part of IBM's commitment to advancing and accelerating quantum innovation in India, IBM India recently signed an MoU with the Ministry of Electronics and Information Technology (MeitY) to collaborate with The Centre for Development of Advanced Computing (C-DAC).

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