Delta Partners with IBM to Explore Quantum Computing - an Airline Industry First

Airline joins IBM Quantum Network to accelerate quantum research, application development

LAS VEGAS, Jan. 8, 2020 /PRNewswire/ -- IBM (NYSE: IBM) and Delta Air Lines announced today that the global airline is embarking on a multi-year collaborative effort with IBM - including joining the IBM Q Network™ - to explore the potential capabilities of quantum computing to transform experiences for customers and employees.

"Partnering with innovative companies like IBM is one way Delta stays on the leading edge of tech to better serve our customers and our people, while drawing the blueprints for application across our industry," said Rahul Samant, Delta's CIO. "We've done this most recently with biometrics in our international terminals and we're excited to explore how quantum computing can be applied to address challenges across the day of travel."

Delta's CEO Ed Bastian delivered the CES 2020 opening keynote address that focused on how Delta is transforming travel into a part of the journey to look forward to. The airline is using technology to extend the warmth of its people to non-traditional airline touchpoints and delivering innovative experiences that reduce stress across the travel day.

The IBM Q Network™ is a 100-plus strong global community of Fortune 500 companies, startups, academic institutions and research labs working to advance quantum computing and explore practical applications.

Additionally, through the IBM Q Hub at NC State University, Delta will have access to the IBM Q Network's world's largest fleet of universal hardware quantum computers for commercial use cases and fundamental research, including the recently-announced 53-qubit quantum computer, which has the most qubits of a universal quantum computer available for external access in the industry, to date.

"We are very excited by the addition of Delta to our list of collaborators working with us on building practical quantum computing applications," said Director of IBM Research Dario Gil. "IBM's focus, since we put the very first quantum computer on the cloud in 2016, has been to move quantum computing beyond isolated lab experiments conducted by a handful of organizations, into the hands of tens of thousands of users. We believe a clear advantage will be awarded to early adopters in the era of quantum computing and with partners like Delta, we're already making significant progress on that mission."

"Delta joins more than 100 clients already experimenting with commercial quantum computing solutions alongside classical computers from IBM to tackle problems like risk analytics and options pricing, advanced battery materials and structures, manufacturing optimization, chemical research, logistics and more," said Jamie Thomas, General Manager, Strategy and Development for IBM Systems. "As the first airline to join the IBM Q network, I'm looking forward to exploring how we can work together to solve real business challenges in a new industry alongside our Hub members at NC State."

"NC State is proud to partner with Delta to accelerate real-world applications as part of our IBM Q Hub," said IBM Q Hub at NC State Executive Director Dr. Daniel Stancil. "Our quantum-trained students and researchers are excited to work alongside IBM and Delta to identify opportunities for development and implementation."

For more information about the IBM Q Network, as well as a full list of all partners, members, and hubs, visit