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Quantum Computing Education: Shaping Tomorrow's Workforce

As quantum computing advances, the demand for a highly skilled workforce is becoming increasingly urgent. Governments and industries worldwide are investing heavily in quantum technology, recognizing its potential to drive innovation and transform economies. However, the progress of this field depends not just on technological breakthroughs but also on the availability of professionals who can apply quantum principles to real-world problems.

Education plays a pivotal role in closing this talent gap. Developing effective quantum training programs is essential to prepare individuals for careers in research, industry, and emerging quantum startups. In this talk, I will discuss the necessity of quantum education in workforce development, the challenges in designing effective training programs, and how such initiatives can contribute to Canada's leadership in the global quantum economy. As an example, I will touch upon the University of Calgary's professional master's program in quantum computing, which is designed for both recent graduates and working professionals, focusing on the practical applications of quantum computing.

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