Quantum Computers and Entanglement
IonQ was founded in 2015 by Jungsang Kim and Chris Monroe, headquartered in College Park, MD.

IonQ is a leader in quantum computing, with technology based on individual atomic qubits, having high quality and reconfigurable quantum operations. We have a clear scaling roadmap to tackle problems that are impossible with classical computers.

We have built several generations of full-stack quantum computer systems, with cloud access via commercial servers.

IonQ has raised $84 million privately, and is set to become a public company in summer 2021, with an estimated $2 billion market capitalization.
IonQ path to scale

2016
Lab scale

2018
Bench scale

Chip scale

2021
Rackmount scale

2023
Modular Photonic Interconnects

Integrated optics delivery and collection

Integrated optical cavities

Integrated SNSPD detectors

1,100-port photonic switch
Jungsang Kim, Bell Labs (2002)
Quantum Science and Technology Pillars

- Quantum Computing
- Quantum Simulation
- Quantum Sensing
- Quantum Communication

Multicore processor

Programmability

HiFi Measurement

Entangled State Prep

Distributed Sensing