

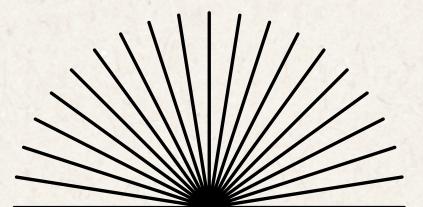


TRANSFORMING TECH KNOWLEDGE TO POLICY DESIGN

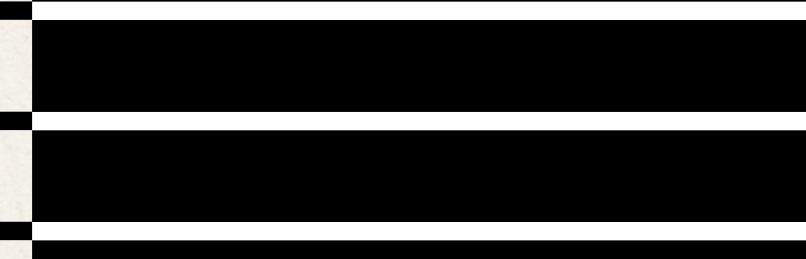
**Breaking down policy considerations that accompany
the growth and emergence of fields like quantum
computing**

AVANTI JOSHI

10/28/2025



Agenda



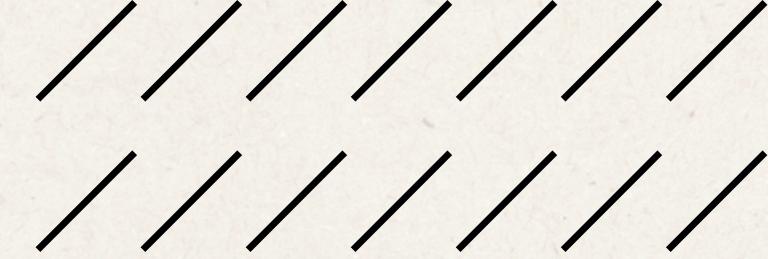
Introduction

Policy Making and Technology

Quantum Computing and Research Policy

Quantum in the 119th Congress

**How Can Technologists Inform Policy
Making?**



Introduction

- **Former software engineer who worked in government modernization**
- **Current legislative fellow focusing on emerging technology and government modernization**

Policy Making and Technology

- In general what are areas policy makers think about in regards to emerging technology?**

Policy Making and Technology

- **Analyze Risks**
 - **Ex. cybersecurity, privacy**
- **Promote Innovation**
 - **Ex. research applications, commercialization, support small businesses**

Quantum Computing and Research Policy

- Specific quantum computing areas policy makers should be thinking about?



Quantum Computing and Research Policy

- Analyze Risks
 - Ex. Cyber risks from bad actors and foreign adversaries
- Promote innovation
 - Ex. Pharmaceutical applications, strengthen quantum supply chain, promote quantum workforce

Quantum in the 119th Congress

Bill	Description	Bill	Description
Quantum LEAP Act of 2025	Creates a Commission on American Quantum Information Science Dominance	Quantum Sandbox for Near-Term Applications Act of 2025	Establishes public-private partnership for near-term quantum application development and acceleration
Support for Quantum Supply Chains Act	Accelerates the development of supply chain supporting technology for quantum information science, technology, and reduce risks in the quantum supply chain	Quantum Encryption Readiness and Resilience Act	Accelerates the development of supply chain supporting technology for quantum information science, technology, and reduce risks in the quantum supply chain
Post Quantum Cybersecurity Standards Act	Advances the rapid deployment of post quantum cybersecurity standards across the United States economy		

Quantum in the 119th Congress

Hearing	Description
“From Policy to Progress: How the National Quantum Initiative Shapes U.S. Quantum Technology Leadership”	Evaluate the state of quantum research, development, and technology (RD&T) in the United States. Also assess the current position of the American quantum industry in the global landscape.
“Preparing for the Quantum Age: When Cryptography Breaks”	Explore the current state of quantum computing and the global competitive landscape, and the impact quantum computing will have on cybersecurity

How can technologists inform policy making?

- Practitioners are often on the receiving end of technology policy**
- Practitioners have seen policies that work well and those that don't**
- Find an organization that aligns with your background - share your experiences, insights, and opinions about existing or new policy ideas!**

Thank you!

