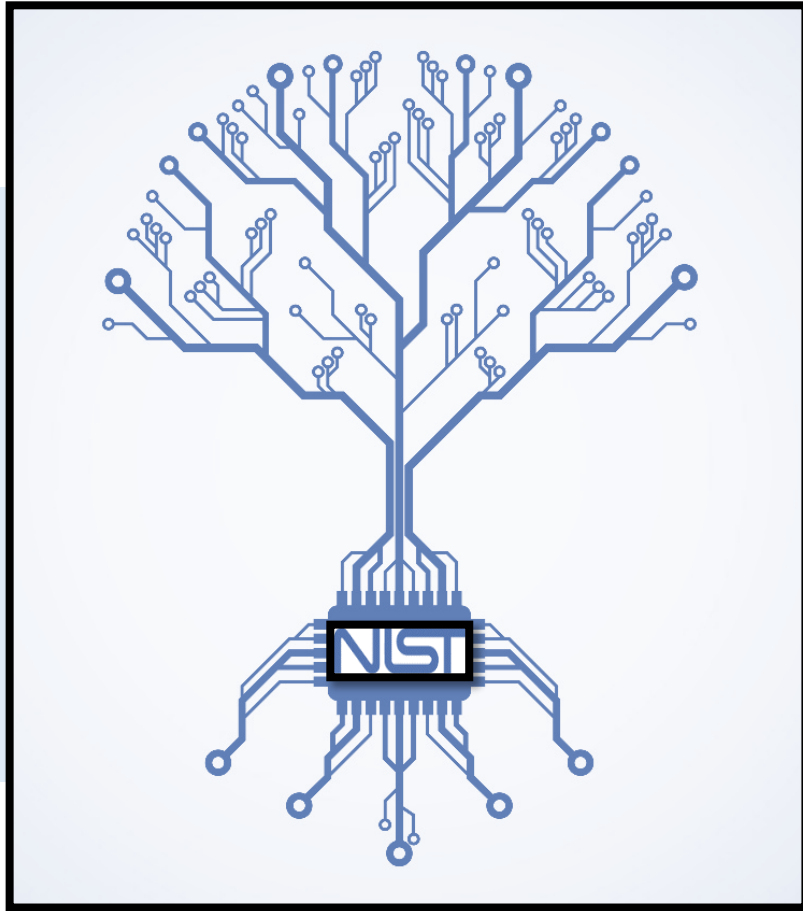


# NIST Cybersecurity Updates

## ITL's Forward Progress

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Julie Chua  
Chief, Applied Cybersecurity  
Division, ITL



Credit: Shutterstock

We **cultivate trust** by advancing cybersecurity & privacy **standards, guidelines, technology,** and **measurement science.**

# NIST CET Priority Areas



## ARTIFICIAL INTELLIGENCE

Improving trustworthy AI, driving innovation, and supporting AI adoption across U.S. industries



## NEXT-GENERATION COMMUNICATIONS

Advancing 6G and innovation in wireless networking, and modernizing U.S. public safety communications infrastructure

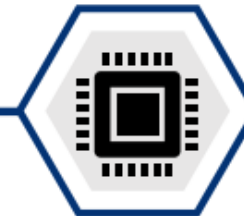
## BIOTECHNOLOGY

Enabling emerging biotechnology and biomanufacturing innovation to drive growth of the U.S. bioeconomy



## SEMICONDUCTORS

Revitalizing U.S. semiconductor manufacturing competitiveness



## CYBERSECURITY AND PRIVACY

To enable the development and deployment of emerging technologies



## QUANTUM TECHNOLOGY

Leading research in quantum science to drive commercialization of quantum systems for U.S. industry

Software and AI Agent Identity

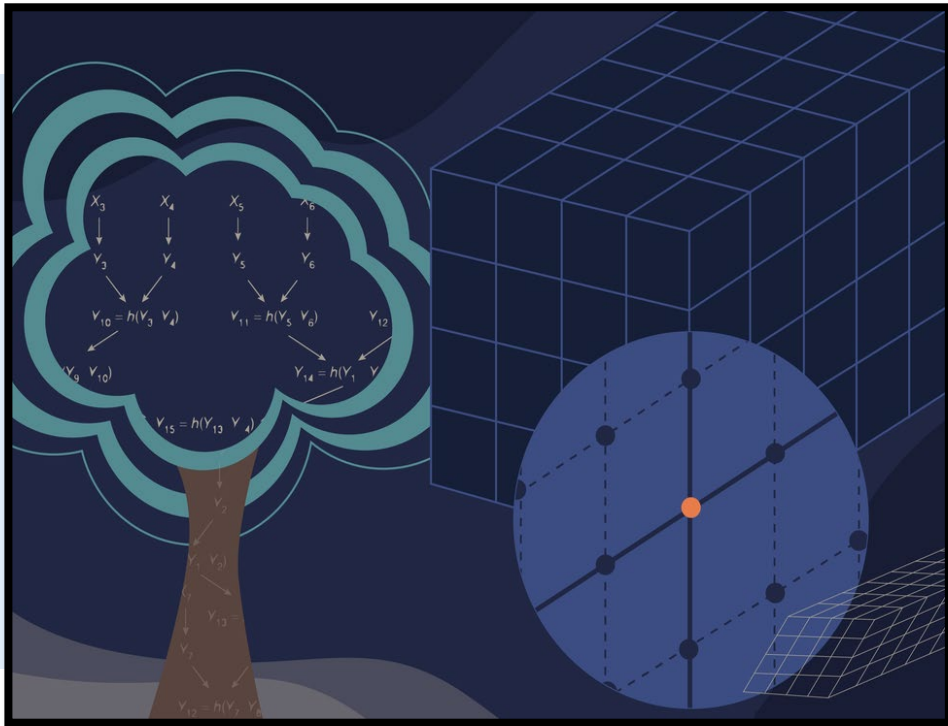
Extending Application of our Existing  
Cybersecurity Resources

Test Platforms and Resources



Credit: NIST

# Post Quantum Cryptography (PQC)



Credit: N. Hanacek, NIST

PQC Standardization

Cryptographic Validation

Migration to PQC

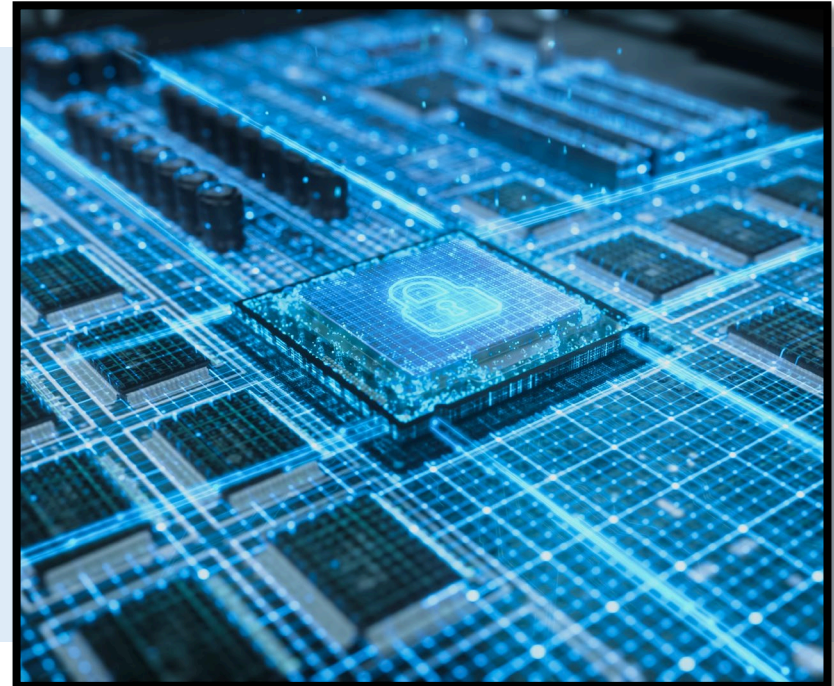
# Hardware Security

Semiconductor Traceability Work

Ongoing Research and Hardware Lab

AI Data Center Security

AI Incident Response



Credit: Shutterstock



Credit: Shutterstock

Secure Software Development Framework (SSDF)

DevSecOps

National Vulnerability Database (NVD)

# STAY IN TOUCH

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## CONTACT US



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# Questions?

[www.nist.gov](http://www.nist.gov)



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