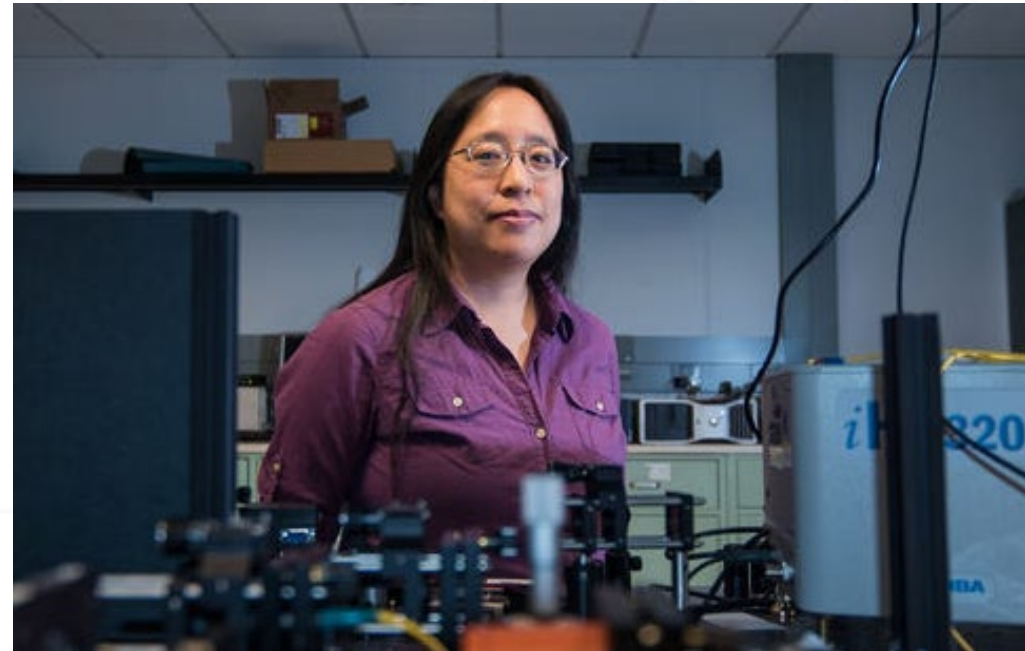


NIST Cybersecurity and Privacy Updates

Chuck Romine

March 9, 2022

Cultivating Trust in IT and Metrology



From Innovation to Adoption

**Fundamental
Research**

**Applied
Research**

**Standards + Best
Practice Guides**

Adoption

Image Credit: wsj.com



Dr. Laurie Locascio

Nominee for Under Secretary of Commerce for Standards and Technology, NIST Director

Vice President for Research at the University of Maryland, College Park and the University of Maryland, Baltimore

At NIST:

- Acting Principal Deputy Director and Associate Director for Laboratory Programs (ADLP)
- Material Measurement Laboratory (MML) Director

**AN ASSESSMENT OF
SELECTED DIVISIONS OF THE
INFORMATION TECHNOLOGY LABORATORY
AT THE NATIONAL INSTITUTE OF STANDARDS
AND TECHNOLOGY**

FISCAL YEAR 2021

Panel on Assessment of Selected Divisions of the
National Institute of Standards and Technology (NIST) Information
Technology Laboratory

Committee on NIST Technical Programs

Laboratory Assessments Board

Division on Engineering and Physical Sciences

A Consensus Study Report of

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

THE NATIONAL ACADEMIES PRESS
Washington, DC
www.nap.edu

NASEM Review June 21-24, 2021

- Information Access Division
- Software and Systems Division
- Statistical Engineering Division

<https://inet.nist.gov/itl/committees-interagency>

Noteworthy mentions - 1



ELECTION
SECURITY



NATIONAL AI
RESEARCH
RESOURCE TASK
FORCE



INTERNET OF
THINGS FEDERAL
WORKING GROUP



INTERNET OF
THINGS ADVISORY
COMMITTEE

Noteworthy mentions - 2



GENOMIC DATA
CYBERSECURITY & PRIVACY



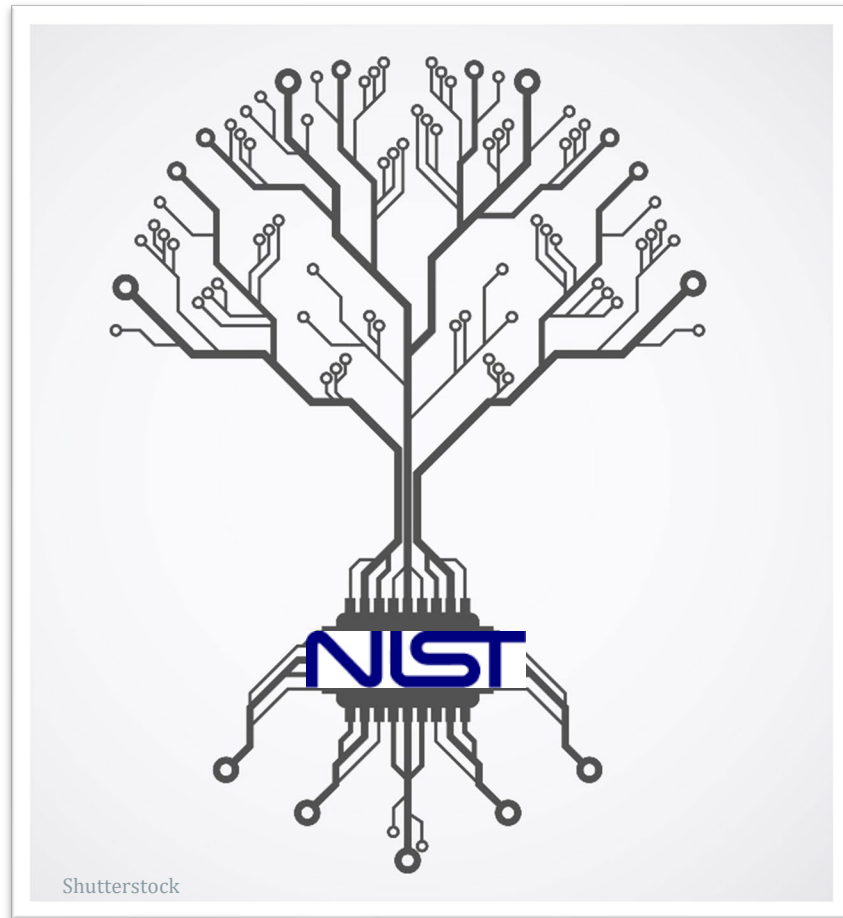
UPDATED FEDERAL
PIV STANDARD



TRADE AND TECHNOLOGY
COUNCIL TECHNOLOGY
(STANDARDS, AI)



QUADRILATERAL
SECURITY DIALOGUE
STANDARDS SUB-GROUP



1. Quantum Resistant Encryption Algorithms

2. Cybersecurity Labeling for Consumers: IoT and Software per EO 14028

Update to Secure Software Development Framework per EO 14028 on Feb 4, 2022.

3.

Cybersecurity Framework and Supply Chain RFI on Feb 22, 2022.

4.

Cultivate trust in the design, development, use and governance of artificial intelligence technologies and systems.



Development of AI Risk Management



Establishing National AI Advisory Committee



AI Standards and Evaluation

Quantum entanglement of two macroscopic objects is the *Physics World* 2021 Breakthrough of the Year

14 Dec 2021 [Hamish Johnston](#)

The *Physics World* 2021 Breakthrough of the Year goes to two independent teams for entangling two macroscopic vibrating drumheads, thereby advancing our understanding of the divide between quantum and classical systems. The winners are [Mika Sillanpää](#) and colleagues at Aalto University, Finland and the University of New South Wales, Australia, together with a team led by [John Teufel](#) and [Shlomi Kotler](#) of the US National Institute of Standards and Technology (NIST).

N. Lefkovitz, K. Boeckl, N. Grayson, M. Nguyen, L. Carnahan, V. Pillitteri , A. Sedgewick, D. Gilbert – DoC Gold Award

Jeffrey Cichonski – DoC Bronze Award; Benjamin Long – DoC Bronze Award; John Lu – DoC Bronze Award

Jonathan Fiscus, Haiying Guan, Andrew Delgado, Yooyoung Lee , Amy N. Yates – DoC Bronze Award

Oliver Borchert, Douglas Montgomery, Kotikalapudi Sriram, Patrick Gleichmann – DoC Gold Award

Douglas Montgomery – DoC Bronze Award; Larry Nadel, Mike Garris– DoC Bronze Award

Bryan Evans, Anthony Kearsley – DoC Silver Award; Thomas Gerrits – DoC Silver Award

Mark Trapnell, Eric Trapnell, Dylan Yaga , Murugiah Souppaya – DoC Silver Award

Alden Dima, Talapady Bhat, Benjamin Long, Jacob Collard – DoC Bronze Award

Darrin Dimmick, Angela Ellis, Gabriella Gomez – DoC Bronze Award

Wo Chang – ANSI Edward Lohse Information Technology Medal

Blaza Toman – DoC Bronze Award + CITAC Best Paper Award

Hariharan Iyer – DoC Gold Award + Judson C. French Award

Ellen Voorhees – DoC Gold Award + NIST Fellow

Mary Theofanos – INCITS Exceptional International Leadership Award

Ron Ross – The Ret. General Michael V. Hayden Lifetime Achievement Award

Robert Byers; David Waltermire; Christopher Turner – 2021 Innovate IT Award

P. Jonathon Phillips – Career Achievement Award from Federal Identity Forum 2021

Annie Sokol – 2021 INCITS Merit Award; John Messina – 2021 INCITS Service Award

Elham Tabassi – 2021 Federal 100 Award; Victoria Yan Pillitteri – 2021 Federal 100 Award

Jenise Reyes-Rodriguez – Diversity, Inclusivity and Equal Employment Opportunity Award

Ram D. Sriram, 2021 Distinguished Alumni Award – the Indian Institute of Technology, Madras

Tony Kearsley – 2021 winner of the Excellence in Research in Applied Mathematics Washington Academy of Sciences

Bonita Saunders 2021 Etta Zuber Falconer Lecturer – Association for Women in Math and the Mathematical Association of America

J. Teufel, S. Kotler, E. Shojaee, A. Kwiatkowski, S. Geller, S. Glancy, M. Knill–1st place Physics World 2021 Breakthrough of the Year



2022

Celebrating 75 years of applied math and statistics at NIST

2022

Celebrating 50 years of Cybersecurity research at NIST

2023

Celebrating 60 years of Biometrics research at NIST

