NIST Cybersecurity and Privacy Updates
Chuck Romine
March 9, 2022
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
### Cybersecurity and Privacy

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<th>1.</th>
<th>Quantum Resistant Encryption Algorithms</th>
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<td>2.</td>
<td>Cybersecurity Labeling for Consumers: IoT and Software per EO 14028</td>
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Artificial Intelligence

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).
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