NIST Cybersecurity and Privacy Updates
Chuck Romine
Oct 26, 2022
CHIPS Act At A Glance

Creating Helpful Incentives to Produce Semiconductors for America Act

CHIPS for America Fund
$50 billion allocated over 5 years

Financial Incentives Programs
$39 billion

Research and Development
$11 billion
- NSTC • APMP • MFG USA Institute(s)
- NIST Metrology program

Workforce Development
CHIPS and Science Act

- Support Critical Technology Research and Standards
- Support U.S. Manufacturing
- Addresses Pressing Technology Challenges
- Helps Tackle Climate Change
- Promotes U.S. Competitiveness in International Standards
- Creates a 21st Century NIST

It includes a full NIST reauthorization
Increases NIST funding by 40 percent to $1.5 billion in fiscal year 2023
It is only authorization.
NIST Wide Critical and Emerging Technologies

**BIOTECHNOLOGY**
And engineering biology to impact the health, agricultural, and industrial sectors

**ARTIFICIAL INTELLIGENCE**
Transparent, trustworthy AI and machine learning

**CYBERSECURITY AND PRIVACY**
To enable the development and deployment of emerging technologies

**ENERGY TECHNOLOGIES**
Generation, storage, distribution, and secure, climate-friendly, efficient utilization of energy

**ADVANCED COMMUNICATIONS**
(5G and beyond) and wireless technologies

**QUANTUM INFORMATION SCIENCE**
Leveraging quantum mechanics for the storage, transmission, manipulation, computing, or measurement of information
The Zero Trust Architecture (ZTA) team at NIST’s National Cybersecurity Center of Excellence (NCCoE) has published volume B of a preliminary draft practice guide titled “Implementing a Zero Trust Architecture”.
“[NIST’s] CSF is one of the leading frameworks for private sector cybersecurity maintenance. We want private and public sector organizations to help make it even more useful and widely used, including by small companies.”

Commerce Deputy Secretary Don Graves
DevOps brings together software development and operations, shortening development cycles, making organizations more agile, and taking advantage of cloud-native technology and practices. Industry and government are rapidly implementing these practices, but often do so without a full understanding and consideration of security.
Artificial Intelligence update

AI Risk Management Framework draft and workshop, Mitigating AI Bias in Context

Building AI RMF Workshop #3, Oct 18-19

Draft Playbook Companion to the AI Framework
Katzcy Teams up with NIST on Cybersecurity Games
OCTOBER 21, 2022

Katzcy®, a woman-owned small business, has signed a five-year cooperative agreement with the DOC and NIST
Congressional Hearings or Briefing

TRUSTWORTHY AI: MANAGING THE RISKS OF ARTIFICIAL INTELLIGENCE

House Committee on Science, Space and Technology, Subcommittee on Research & Technology Sept 29, 2022

EXPLORING CYBER SPACE: CYBERSECURITY ISSUES FOR CIVIL AND COMMERCIAL SPACE SYSTEMS

House Committee on Science, Space and Technology, Subcommittee on Space and Aeronautics July 28, 2022

PRIVACY IN THE AGE OF BIOMETRICS

House Committee on Science, Space and Technology, Subcommittee on Investigation and Oversight June 29, 2022
2022
Celebrating 75 years of applied math and statistics at NIST

2022
Celebrating 50 years of Cybersecurity research at NIST

On September 29th, ITL launched the NIST Cybersecurity Program History and Timeline

2023
Celebrating 60 years of Biometrics research at NIST
Take A Walk Through Time

NIST Cybersecurity Program History and Timeline

For 50 years, NIST—formerly the National Bureau of Standards (NBS), until 1988—has conducted cybersecurity research and developed cybersecurity guidance for industry, government, and academia. Since 1972, NIST has made extraordinary advancements in cybersecurity, leading the effort to the current state of technology that exists today.

To highlight many of these accomplishments and honor the hard work and dedication by NIST’s cybersecurity staff, NIST has developed the NIST Cybersecurity Program History and Timeline. The timeline provides an overview of the major research projects, programs, and ultimately, NIST’s cybersecurity history.

This history has been compiled by bringing together several sources of information, including written contributions from and interviews with current and former NIST employees, the Annual Reports on cybersecurity produced by NIST starting in 2003, and current and past NIST webpages and publications.

Also see our 50th Anniversary of Cybersecurity at NIST site for events, blogs, and other resources!

August 1979

Automatic Data Processing Risk Analysis Guidance

FIPS 85 described a method for performing risk assessments based on the work of the IBM Corporation’s Robert H. Courtney, Jr.
Some Recognitions

Congratulations to Ram Sriram, who has achieved the status of IEEE Life Fellow Status in recognition of many years of loyal membership and support of the activities.

Congratulations to Raghu Kacker, who was recently named Fellow of the Washington Academy of Science for outstanding contributions in enabling the field of combinatorial testing in measurement science and software engineering.

Congratulations to Kamran Sayrafian, who was recently named Fellow of the Washington Academy of Science for recognition of outstanding contributions to mathematical and computational modeling of Body Area Networks.

Congratulations to Paul Patrone, who received the Excellence in Research in Applied Mathematics Award from the Washington Academy of Science.

Congratulations to Barbara Guttman (SSD), who received the Leadership in Forensic Science Award from the Washington Academy of Science.

Congratulations to the members of the Image Group in IAD who were recognized with the Service and Leadership Award at the 2022 Federal Identity Forum. The Image Group’s contactless fingerprint research team was also recognized as a finalist for the 2022 Federal Identity Forum Best Educational Effort Award.