duarterly Newsletter for the Networking and information Technology Research and Development Program

NITRD Spotlight

HAPPY 27TH Anniversary to NITRD!!

January 3, 2018, marked the official 27th anniversary of the NITRD Program. Though the name has changed since its beginning, the member agencies have increased, and the Program Component Areas (PCAs) and Interagency Working Groups (IWG) have evolved, the commitment of the Program remains strong, to ensure U.S. leadership in advanced IT R&D for societal benefit to all Americans.

NITRD National Coordination Office Welcomes a New Deputy Director

On October 16, 2017, the NITRD National Coordination Office welcomed its new Deputy Director, Kamie (Kathleen) Roberts from the National Institute of Standards and Technology/Information Technology Laboratory (NIST/ITL), where she served as the Associate Director of the Federal and Industrial Relations and Chief of Staff for the ITL. Prior to joining the NITRD NCO, Ms. Roberts served an active role in the NITRD Interagency Working Groups (IWGs) and as the NIST NITRD Subcommittee Representative. Read her full Bio.

FY 2019 NITRD Program Component Areas (PCAs)

The NITRD Program Component Areas (PCAs) are the major subject areas for Federal IT R&D, and have evolved over the past few years, reflecting changes in IT R&D activities at Federal agencies and IT R&D priorities of the Administration. By Congressional mandate, the annual NITRD Supplement to the President's Budget is organized by the PCAs, and the NITRD Interagency Working Groups (IWGs) report agency R&D and NITRD coordination activities under those PCAs. For the FY 2019 NITRD Supplement to the President's Budget, the PCAs that will be used can be viewed here.



Straight from the Director's Corner

Dr. Bryan Biegel, NCO Director and Co-chair, NITRD Subcommittee

Achieving a Brighter Future with NITRD

The NITRD Program will be essential in helping our Nation achieve a brighter future through advances in information technology (IT).

Evidence of this is seen in past Federal IT R&D, which led to technologies that help us today (e.g. the Internet, Global Positioning System, and smartphone assistants). Current Federal IT R&D is creating a world of personalized learning, personalized healthcare, and computers capable of answering any technical question.

Future technologies born out of Federal IT R&D may include such "science fiction" as real-time universal translators, super intelligent androids, and supercomputers capable of answering any question in real-time. But such powerful technologies can be used for dark purposes as well.

Achieving a bright future with such technologies, which span the NITRD portfolio, is threatened by competition from millions of researchers around the world, including those intending to do harm or who do not fully consider the risks of the powerful technologies they are creating.

The U.S. government has a decades-long record of helping to achieve a brighter future with advanced IT through two roles: leading the world's IT advancement through aggressive funding of IT R&D, and leading the use of IT for social good, as evidenced by recent NITRD area strategic plans, which seek societal interests as well as technology advancement.

I believe that, as long as the U.S. continues to fill these two roles, with the contributions of the NITRD Program, the Nation and world will continue to achieve a brighter future through the advances in

As always, don't hesitate to contact us at: NITRDLeadsIT@nitrd.gov

Page 2 NITRD LEADS IT

2017 - Year in Review

Over the past year, NITRD has facilitated major interagency coordination efforts that have advanced the Federal IT R&D agenda, goals of Presidential memoranda, national priorities, and societal benefits.

The following documents and workshops highlight the activities completed under the NITRD Program in 2017:

- <u>Big Data for Security Can We Improve Security</u> <u>and Preserve Privacy?</u> – December 2017
- Blurring the Lines: High-End Computing and Data Science, Supercomputing 2017 Conference (SC17) Panel - November 2017
- Global Networking Update, SC17 November 2017
- <u>Grid Computing Challenges and Solutions</u>, SC17
 November 2017
- <u>FY2018 NITRD Supplement to the President's</u> Budget – October 2017
- The NITRD NCO relocation to L'Enfant Plaza, Washington, DC – October 2017
- 2nd Frontiers of Visualization Virtual Workshop
 October 2017
- NITRD Leads IT Newsletter October 2017
- *NITRD Presentation Library* October 2017
- 3rd Workshop on an Open Knowledge
 Network: Enabling the Community to Build the
 Network October 2017
- <u>Large Scale Networking Workshop on</u>
 <u>Operationalizing Software Defined Networks</u>
 <u>(SDN)</u> September 2017
- Radio Receiver Systems: R&D Innovation
 Needs and Impacts on Technology and Policy May 2017
- Research directions for Federal privacy R&D May 2017
- NITRD Leads IT Newsletter April 2017
- <u>Federal Smart Cities and Communities Programs</u> <u>Resource Guide</u> – March 2017
- Big Data Workshop: Measuring the Impact of <u>Digital Repositories</u> – February 2017
- The National Broadband Research Agenda: Key Priorities for Broadband Research and Data – January 2017

- <u>Smart Cities and Communities Federal</u>
 <u>Strategic Plan: Exploring Innovation</u>
 <u>Together</u> (draft for public comment) –
 January 2017
- <u>Federal Cybersecurity and Privacy R&D</u>
 <u>Strategic Plans: Priorities for Research</u> –
 January 2017
- NITRD Leads IT Newsletter January 2017

NITRD Talks

NITRD continues its work to maintain U.S. leadership in networking and IT R&D through science, technology, and innovation talks that bring together experts from the public and private sectors.

At the November 2017 NITRD Subcommittee meeting, invited guest speaker, Dr. Jon Eisenberg, Senior Board Director of the Computer Science and Telecommunications Board (CSTB) gave an overview of the National Academies and the CSTB. His talk included examples and impacts of CSTB activities, as well as current and planned activities. Read more.

2018 - More to Come

The following events and reports are anticipated in the upcoming months.

- <u>FY 2019 NITRD Supplement to the President's</u> <u>Budget</u>
- Frontiers of Visualization Workshop 2 report
- Wireless Spectrum R&D IWG Workshop IX Report
- Smart Cities and Communities Federal Strategic Plan
- Federal Health Information Technology Research and Development Strategic Framework

Check out the NITRD NCO YouTube videos from workshops, presentations, and meetings! https://www.youtube.com/user/TheNCONITRD

NITRD LEADS IT Page 3

The NITRD Program was established by the <u>High-Performance Computing (HPC) Act of 1991</u> with the overall objective of ensuring the United States' leadership in advanced computing. The NITRD Program is the Nation's coordinator of federally funded work on advanced information technology (IT).

Now in its 27th year, the NITRD Program consists of over 20 Federal member agencies and over 40 participating agencies, and is one of the oldest and largest of the formal Federal programs that engage in multiagency coordination activities. The multi-agency NITRD Program seeks to provide the research and development (R&D) foundations for assuring continued U.S. technological leadership and meeting the needs of the Federal Government for advanced IT.

The NITRD Program also seeks to accelerate development and deployment of advanced IT in order to maintain world leadership in science and engineering, enhance national defense and homeland security, improve US productivity and competiveness, protect the environment, and improve the health, education and quality of life for all Americans.



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