Priorities for the ADLP and NIST Laboratory Programs

Visiting Committee on Advanced Technology

James Olthoff
Associate Director for Laboratory Programs

National Institute of Standards and Technology
U.S. Department of Commerce

NIST Gaithersburg
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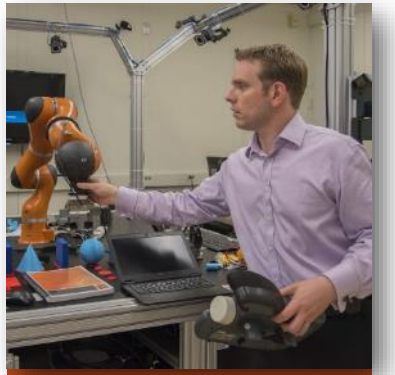
NIST Programmatic Priorities

National Needs

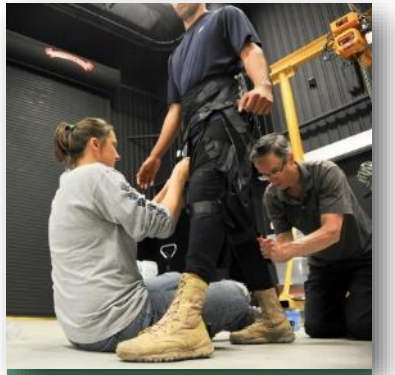


Advanced Manufacturing

Cybersecurity

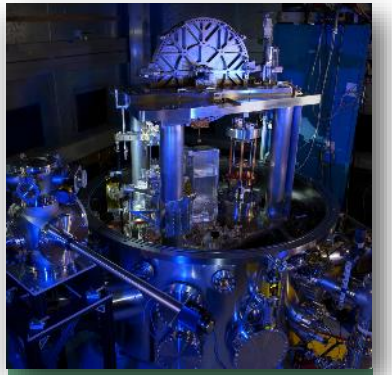
Disaster Resilience

NIST Functions



Documentary Standards

Technology Transfer



Measurement Dissemination

Emerging Technologies

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Engineering Biology

Internet of Things

Quantum Science

Artificial Intelligence

NIST Priorities: Advance U.S. Technological Leadership in the Industries of the Future

NIST will continue to expand research efforts in these five areas and work to strengthen U.S. engagement in standardization efforts

Advanced Communications/5G

AI-enabled measurement systems to support wide deployment of 5G wireless technologies, Participating and leading in 5G standards development

Quantum Science

New quantum networking grand challenge will build on NIST world-leading science, while NIST expands industry partnerships in the Quantum Economic Development Consortium

Advanced Manufacturing

Providing technical support and key infrastructure to the nation's manufacturing industries as they strive to out-innovate global competitors

Artificial Intelligence

Leading efforts to prioritize and address key AI standards needs while developing training and testing tools for research domains from materials science to robotics

Engineering Biology

Living Systems Foundry for safe, predictable design and control of biological systems

NIST Focus Areas

Definition of a Focus Area:

The purpose of a focus area is to **clearly articulate** to internal and external stakeholders **what is being accomplished** in support of the unique mission and role of NIST. The focus areas are intended to be **forward-looking, impactful, and an expression of shared goals** by leadership and staff. A focus area requires an increased concentration of **resources,** and represents a **commitment** of NIST leadership to achieve clearly defined goals.

NIST Focus Areas: Grand Challenges

Quantum Science

Demonstrate a 2-node quantum network.

Internet of Things

Focus on Industrial Internet of Things.

Artificial Intelligence

Launch AI Data Center.

Engineering Biology

Build and deploy a Living Measurement Systems Foundry.

DISCUSSION