Research Opportunities at the National Institute of Standards and Technology

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Abstract
From automated teller machines and atomic clocks to mammograms and semiconductors, innumerable products and services rely in some way on technology, measurement, and standards provided by the National Institute of Standards and Technology. Founded in 1901, NIST is a non-regulatory federal agency within the U.S. Department of Commerce, whose mission is to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.

As one of the major research components of NIST, Information Technology Laboratory accelerates the development and deployment of information and communication systems that are reliable, usable, interoperable, and secure; advances measurement science through innovations in mathematics, statistics, and computer science; and conducts research to develop the measurements and standards infrastructure for emerging information technologies and applications.

We will provide an overview of ITL work in areas as diverse as cybersecurity, cryptography, data access, usability, complex systems, and computational science. We will also describe technical opportunities within NIST and ITL for both students and researchers.

Biography
Ronald F. Boisvert leads the Mathematical and Computational Sciences Division of the Information Technology Laboratory at the National Institute of Standards and Technology (NIST). He received his Ph.D. in computer science from Purdue University in 1979 and has been at NIST since then. His research interests include numerical solution of partial differential equations, mathematical software, and information services that support computational science.

For the full abstract and biography, please go to: http://www.eecs.berkeley.edu/Colloquium/Archives/09-10/Fall2009/boisvert.shtml