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Priorities for the National Privacy Research Strategy

JULY 1, 2016 AT 12:49 PM ET BY JAMES KUROSE, KEITH MARZULLO



Summary: National Privacy Research Strategy calls for research in science and engineering that will enable the U.S. to benefit from innovative data use while protecting privacy.

Vast improvements in computing and communications are creating new opportunities for improving life and health, eliminating barriers to education and employment, and enabling advances in many sectors of the economy. The promise of these new applications frequently comes from their ability to create, collect, process, and archive information on a massive scale.

However, the rapid increase in the quantity of personal information that is being collected and retained, combined with our increased ability to analyze and combine it with other information, is creating concerns about privacy. When information about people and their activities can be collected, analyzed, and repurposed in so many ways, it can create new opportunities for crime, discrimination, inadvertent disclosure, embarrassment, and harassment.

This Administration has been a strong champion of initiatives to improve the state of privacy, such as the "[Consumer Privacy Bill of Rights](#)" proposal and the creation of the [Federal Privacy Council](#). Similarly, the White House report [Big Data: Seizing Opportunities, Preserving Values](#) highlights the need for large-scale privacy research, stating: "We should dramatically increase investment for research and development in privacy-enhancing technologies, encouraging cross-cutting research that involves not only computer science and mathematics, but also social science, communications and legal disciplines."

Today, we are pleased to release the [National Privacy Research Strategy](#). Research agencies across government participated in the development of the strategy, reviewing existing Federal

research activities in privacy-enhancing technologies, soliciting inputs from the private sector, and identifying priorities for privacy research funded by the Federal Government. The National Privacy Research Strategy calls for research along a continuum of challenges, from how people understand privacy in different situations and how their privacy needs can be formally specified, to how these needs can be addressed, to how to mitigate and remediate the effects when privacy expectations are violated. This strategy proposes the following priorities for privacy research:

- Foster a multidisciplinary approach to privacy research and solutions;
- Understand and measure privacy desires and impacts;
- Develop system design methods that incorporate privacy desires, requirements, and controls;
- Increase transparency of data collection, sharing, use, and retention;
- Assure that information flows and use are consistent with privacy rules;
- Develop approaches for remediation and recovery; and
- Reduce privacy risks of analytical algorithms.

With this strategy, our goal is to produce knowledge and technology that will enable individuals, commercial entities, and the Federal Government to benefit from technological advancements and data use while proactively identifying and mitigating privacy risks. Following the release of this strategy, we are also launching a Federal Privacy R&D Interagency Working Group, which will lead the coordination of the Federal Government's privacy research efforts. Among the group's first public activities will be to host a workshop to discuss the strategic plan and explore directions of follow-on research. It is our hope that this strategy will also inspire parallel efforts in the private sector.

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