



Information and Privacy  
Commissioner/Ontario  
Commissaire à l'information  
et à la protection de la vie privée/Ontario

News Release

July 12, 2012

## New privacy threats unveiled by 2012 PETs award winner

TORONTO, July 12, 2012 - The 2012 **Award for Outstanding Research in Privacy Enhancing Technologies** (PET Award), was presented in Vigo, Spain on Wednesday.

Ontario Information and Privacy Commissioner, Dr. Ann Cavoukian, and Microsoft are the co-sponsors of the award, which was created in 2003 to encourage the development of technology to protect privacy, rather than to threaten it. The winners are selected by a global panel of leading technology researchers.

The winning paper is entitled, "[Phonotactic Reconstruction of Encrypted VoIP Conversations Hookt on fon-iks](#)," authored by Andrew M. White, Austin R. Matthews, Kevin Z. Snow and Fabian Monrose, all from the University of North Carolina at Chapel Hill, in the departments of Computer Science and Linguistics.

The paper unveils new privacy threats against Voice-over-IP (VoIP) telephony, which enables people to use the Internet to make telephone calls. VoIP is making steady headway as a replacement for traditional telephony across the world in both residential and business sectors. The security and privacy implications of VoIP are still not well understood.

"Drawing on insights from the computational linguistics and speech recognition communities, we apply novel techniques for unmasking parts of the conversation. We believe our ability to do so underscores the importance of designing secure (yet efficient) ways to protect the confidentiality of VoIP conversations," say the authors in the paper's abstract.

Commissioner Cavoukian, renowned for her creation of *Privacy by Design* - the global framework for proactively embedding privacy directly into technologies, as the default condition, said, "I applaud the winners on this remarkable achievement. It is truly amazing that the researchers were able to successfully reconstruct the encrypted VoIP conversations in such a high percentage of cases by using very little information. Private conversations have become available due to a security loophole, which was previously considered benign, in the encoding and encryption of VoIP. This brilliant work should cause a major VoIP redesign which, in turn, will benefit the privacy of millions of users."

For more information about the privacy technology awards, visit <http://petsymposium.org/award/>.

### About the IPC

The Information and Privacy Commissioner is appointed by and reports to the Ontario Legislative Assembly, and is independent of the government of the day. The Commissioner's mandate includes



2 Bloor Street East  
Suite 1400  
Toronto, Ontario  
Canada M4W 1A8

2, rue Bloor Est  
Bureau 1400  
Toronto (Ontario)  
Canada M4W 1A8

416-326-3333  
1-800-387-0073  
Fax/Téléc: 416-325-9195  
TTY: 416-325-7539  
<http://www.ipc.on.ca>

overseeing the access and privacy provisions of the *Freedom of Information and Protection of Privacy Act* and the *Municipal Freedom of Information and Protection of Privacy Act*, as well as the *Personal Health Information Protection Act*, which applies to both public and private sector health information custodians. A vital component of the Commissioner's mandate is to help educate the public about access and privacy issues.

For further information:

Information and Privacy Commissioner of Ontario, Canada

Communications

(416) 326-3333

Toll free: 1-800-387-0073

[media@ipc.on.ca](mailto:media@ipc.on.ca)