



Information and Privacy
Commissioner/Ontario

Commissaire à l'information
et à la protection de la vie privée/Ontario

News Release

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Award winner's breakthrough efforts reveal how technology can *lock-in* privacy: Commissioner Ann Cavoukian

A major breakthrough by IBM researcher Craig Gentry has led to him being named as the winner of the 2010 **Privacy Enhancing Technology Award**, which was presented to him in Berlin Wednesday.

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

Commissioner Cavoukian, who has been advocating, for more than a decade, the importance of using technology to protect privacy, stressed that Gentry's breakthrough "demonstrates how technology can be an extremely effective privacy-enhancing tool."

Gentry solved a perplexing mathematical problem that has challenged researchers, ever since public-key encryption was invented several decades ago. The breakthrough, called "privacy homomorphism" or "fully homomorphic encryption," makes possible the deep and unlimited analysis of encrypted information – data that has been intentionally scrambled – without sacrificing confidentiality.

Gentry explains it much more simply, describing it as "delegating processing, without giving away access."

IBM said that potential applications for using the mathematical solution include strengthening the business model of "cloud computing" and protecting information contained in electronic medical records.

Commissioner Cavoukian applauds Mr. Gentry for his exceptional achievement!

For more information about the Privacy Enhancing Technology Awards, which are funded by Microsoft, visit <http://petsymposium.org/award/>.

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