Is Privacy Possible in the Online World?

An interview with Professor Ian Goldberg
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What does online privacy mean?

Privacy is not just about protecting who you are, your identity when you go online, it also is about protecting what you do. Right, even if someone doesn't know who you are, they can still create a large dossier about you and we see that quite prevalently for example in the online advertising industry where they gather information about all the different websites you visit, all the different clicks you make and from that they can build a big picture of you, even if they don't learn your actual name. All this information is stored somewhere else, it's out of your control and you have no idea what it is or will be used for. Just having these kinds of dossiers makes for an attractive target to cyber criminals.

What has your research achieved?

One of our most successful research outcomes is called Off the Record Messaging or OTR. OTR is used by hundreds of thousands of people around the world to protect the security and privacy of their online communications. Also in our group we work on anonymous communications networks and privacy enhanced communications networks such as TOR. We also work on censorship resistance systems. In many countries, the internet is censored and governments want to control what people are allowed to say or read when they go online. In our research group, we make tools and systems that allow people, even in those censored countries, to access the free and open internet.

What is your vision for the future?

My research vision in the medium to long term is to have all internet communication be private and secure by default, and that's where privacy enhancing technologies such as TOR and related systems come into play. They can protect your internet activities even against someone who's watching your internet traffic.