

# New technology protects against password theft and phishing attacks

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New technology launched today by Royal Holloway University, will help protect people from the cyber attack known as "phishing," believed to have affected 37.3 million of us last year, and from online password theft, which rose by 300% during 2012-13.

Phishing involves cyber criminals creating [fake websites](#) that look like real ones and luring users into entering their login details, and sometimes personal and financial information. In recent months, the Syrian Electronic Army (SEA) has successfully launched phishing attacks against employees of the Financial Times to enable them to post material to its website, and mass attacks were launched within Iran using a fake Google email, shortly before the elections.

Scientists from Royal Holloway have devised a new system called Uni-IDM which will enable people to create electronic identity cards for each website they access. These are then securely stored, allowing owners to simply click on the card when they want to log back in, safe in the knowledge that the data will only be sent to the authentic website. A key feature of the technology is that it is able to recognise the increasing number of websites that offer more secure login systems and present people with a helpful and uniform way of using these.

"We have known for a long time that the username and password system is problematic and very insecure, proving a headache for even the largest websites. LinkedIn was hacked, and over six million stolen user passwords were then posted on a website used by Russian [cyber](#)

[criminals](#); Facebook admitted in 2011 that 600,000 of its [user accounts](#) were being compromised every single day," said Professor Chris Mitchell from Royal Holloway's Information Security Group.

"Despite this, username and password remains the dominant technology, and while [large corporations](#) have been able to employ more secure methods, attempts to provide homes with similar protection have been unsuccessful, except in a few cases such as online banking. The hope is that our technology will finally make it possible to provide more sophisticated technology to protect all internet users."

Uni-IDM is also expected to offer a solution for people who will need to access the growing number government services going online, such as tax and benefits claims. The system will provide a secure space for these new users, many of whom may have little experience using the internet.

**More information:** More information is available from:  
[www.chrismitchell.net/Papers/aucbim.pdf](http://www.chrismitchell.net/Papers/aucbim.pdf)

Provided by Royal Holloway, University of London

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