



COLLEGE OF WILLIAM AND MARY TECHNOLOGY TRANSFER OFFICE

TITLE (AND CASE NUMBER) OF INVENTION

ANTI-PHISHING IN OFFENSE AND DEFENSE (0913)

INVENTORS

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APPLICATIONS

Software: Anti-Phishing Technology. The invention provides protection of one's username and password credential from unauthorized use by individuals or organizations trying to obtain the credential through phishing operations. It can be incorporated into any malware detection software.

SUMMARY

In today's computerized internet world, an individual's financial privacy and security is very often only protected by a username and password. The individual is tasked with protecting this username/password "credential" by keeping the credential secure and secreted from unauthorized use. However, everyday use of this credential frequently leads to a lapse in security. Unscrupulous websites operate with the sole purpose of tricking an individual into providing the credential. These types of unscrupulous websites are known as phishing websites and their attempts to trick an individual into providing their username/password credential are known as phishing attacks.

Many anti-phishing mechanisms currently focus on helping users verify whether a web site is genuine. However, usability studies have demonstrated that prevention-based approaches alone fail to effectively suppress phishing attacks and protect Internet users from revealing their credentials to phishing sites. Instead of preventing human users from "biting the phishing bait", we have developed a new approach to protect against phishing attacks by providing what could be described as "bogus bites". We have developed a unique client-side antiphishing tool, named BogusBiter, which transparently feeds a relatively large number of bogus credentials into a suspected phishing site. BogusBiter conceals a victim's real credential and instead supplies bogus credentials. Moreover, it enables a legitimate web site to identify stolen credentials in a timely manner. Leveraging the power of client-side automatic phishing detection techniques, BogusBiter is complementary to existing anti-phishing approaches, and can be integrated with current phishing detection software as well as warning mechanisms on web browsers.

PATENT STATUS

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