UNIVERSITY OF SOUTH FLORIDA

Major Research Area Paper Presentation

Coauthentication
by
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For the Ph.D. degree in Computer Science & Engineering

Coauthentication is a single-factor authentication technique in which multiple registered devices work together to authenticate a user. Coauthentication provides security benefits similar to those of multi-factor techniques, such as mitigating theft of any one authentication secret, without some of the inconveniences of multi-factor techniques, such as having to enter passwords or biometrics. Coauthentication provides additional security benefits, including: preventing phishing, replay, and man-in-the-middle attacks; basing authentications on high-entropy secrets that can be generated and updated automatically; and availability protections against, for example, device misplacement and denial-of-service attacks. The principal security properties of coauthentication have been formally verified in ProVerif, and implementations have performed efficiently compared to password-based authentication.

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THE PUBLIC IS INVITED

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