Utilizing Keystroke Dynamics as an Additional Security Measure to Password Security in Computer Web-based Applications - A Case Study of UEW

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Abstract

Keystroke Dynamics is one of the well-known and economical behavioral biometric developments that attempt to recognize the genuineness of a client when the client invokes his keystrokes from a computer keyboard. The keystrokes pattern helps to determine the typing behaviour of users of the system thus serves as the benchmark for identity verification. This paper displays the use of biometrics to augment traditional passwords security in computer web-based application systems. The system was evaluated base on these criteria; authenticating legitimate user against imposter user and a guess imposter user of the system. Also, evaluation of character timings was performed to know the best combination of strings to use in setting passwords in systems where keystroke dynamics would be applied in order to achieve high efficiency. This study concludes that the use of keystrokes dynamics in augmenting password security in computer web-based applications should be embraced.

References
   “Continuous Authentication Using Biometrics: Data, Model, and Metrics”. Issa Traore: IGI Global.

**Index Terms**

Computer Science Information Sciences

**Keywords**

Keystroke dynamics, password, biometrics, web-based application, Terminus time, Source time.