Abstract

In the digital era, general and personal data and information such as banking, medication history and other personal information are starting to be digitized. Data and information digitization offers various conveniences, such as the dissemination of information with relatively low time and cost, but behind the convenience offered, data digitization also presents new risks, such as data theft and crime, so a strong and efficient security system is needed to secure the data and information. *Biometric* keystroke is one solution to increase the level of system security, where keystroke offers more efficient and stronger security than traditional security such as passwords, one time passwords (OTP) and single sign on (SSO) because it only requires a device in the form of a keyboard and its use is not disruptive. However, although research related to dynamic keystroke has been widely conducted, most of these studies only rely on one type of N-graph in identifying an individual's identity. Therefore, this study evaluates the performance of dynamic keystroke using the multimodal N-graph method. The study was conducted with two main scenarios, namely, feature fusion classification and decision fusion classification. Based on the research conducted, the use of multimodal N-graph has higher performance compared to the use of N-graph individually in performing classification, with the feature fusion classification approach being superior to decision fusion classification.

Keyword: ***Keystroke, Biometric, Random Forest, N-graph, Dynamic Keystroke, Multimodal.***