

Facial Recognition Technology in Institutions of Higher Learning: Exploring the Use in Kenya

Authors : Samuel Mwangi, Josephine K. Mule

Abstract : Access control as a security technique regulates who or what can access resources. It is a fundamental concept in security that minimizes risks to the institutions that use access control. Regulating access to institutions of higher learning is key to ensure only authorized personnel and students are allowed into the institutions. The use of biometrics has been criticized due to the setup and maintenance costs, hygiene concerns, and trepidations regarding data privacy, among other apprehensions. Facial recognition is arguably a fast and accurate way of validating identity in order to guard protected areas. It guarantees that only authorized individuals gain access to secure locations while requiring far less personal information whilst providing an additional layer of security beyond keys, fobs, or identity cards. This exploratory study sought to investigate the use of facial recognition in controlling access in institutions of higher learning in Kenya. The sample population was drawn from both private and public higher learning institutions. The data is based on responses from staff and students. Questionnaires were used for data collection and follow up interviews conducted to understand responses from the questionnaires. 80% of the sampled population indicated that there were many security breaches by unauthorized people, with some resulting in terror attacks. These security breaches were attributed to stolen identity cases, where staff or student identity cards were stolen and used by criminals to access the institutions. These unauthorized accesses have resulted in losses to the institutions, including reputational damages. The findings indicate that security breaches are a major problem in institutions of higher learning in Kenya. Consequently, access control would be beneficial if employed to curb security breaches. We suggest the use of facial recognition technology, given its uniqueness in identifying users and its non-repudiation capabilities.

Keywords : facial recognition, access control, technology, learning

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