



Abu Dhabi Polytechnic

Students' Graduation Project Abstract

Department:	ISET	Semester:	Spring-2022
Project Title:	Towards Information Protection Using Facial and Gesture Recognition		
Supervisor:	Dr. Yasir Hamid		

Abstract:

Information protection is one of most sought out fields in the current digital world. The digital systems should have adequate protection and security to maintain the trust of its users. A typical system has many levels of protection ranging from physical to data-oriented to access and authorization control. In this project, we plan to incorporate computer vision techniques to carry out the authentication and authorization techniques. For the authentication we plan to use facial recognition, and once the user is verified, he is provided access to his account. At all points of user interaction with the App the user face will be monitored to make sure that user is still around. The session details and the user face will be monitored constantly to avoid any case of an authenticated user moving from the chair and intruder trying to access the account. As far authorization is concerned, we plan to develop gesture-based clearance systems that is in-line with the terminology used by USA Department of Defense. Different hand gestures made by an authenticated system will take as different commands to switch the mode and let the user access his data objects whose sensitivity is lesser than the user mode. This can be helpful where in user must switch the roles quickly on seeing someone approaching his desktop personally.