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CMPT 469

Proposal

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The project I am doing for this class is focused around facial recognition and using that to make decisions. The idea is that this project could be used for security cameras at home to detect who enters and if they are an intruder or not. The user can input a preapproved list of people that may enter the area. The idea is that this program can serve multiple needs. This will hopefully include a raspberry pi which will help make this system seem more practical. The goal is that I will use a camera that will take a picture of a person and pick out where their face is. When the program detects the face it will check to see if that face is a recognized face. The program will use pictures of faces that I provide that are allowed in the area. If the face is recognized the program will take no action and will log what time the person was detected. But if the face is not recognized it will take an action depending on what the user wants. For example, the program could send an email to the owner of the camera. Other actions include making a loud sound or alerting authorities. The program can also be changed so that it could use facial recognition to look for certain faces of interest. The program needs to have a high success rate of at least 90% to be a viable idea. This means that I must tweak the software so that it can be more accurate in a short amount of time. The short amount of time makes the idea a viable program and it will need a high quality camera to be efficient. The program will also need the ability to connect to the

internet so it can send out reports to the owner. This idea will improve home and corporate cameras.