

Facial Recognition for COVID Detection and Prevention at Andrew Hamilton University (AHU)

Case Details

Trisha Brown is the Chief of Safety and Emergency Management (SEM) office at a large suburban university, the Andrew Hamilton University (AHU). She is responsible for the safety and security of all students, faculty, and staff on campus. In recent months, her responsibilities have suddenly shifted from the regular aspects of the work – the police force, traffic safety, fire drills – towards responding to the needs of keeping the university functional and safe during a pandemic. She and members of her office have been working round the clock to ensure that the campus is ready to open for the new semester.

While they work towards this goal, she is also engaged in planning for the future of the campus and as part of this effort she is looking at technology solutions for the problem in hand. She has to be prepared, she has realized, for the eventuality that a vaccine will take some time to develop and even if it does it might not be as effective as it needs to be and not everyone might agree to be vaccinated. She has assembled a taskforce with members from across the university and has worked hard to ensure that all constituents are well represented. On the recommendation of this taskforce, to keep the decision makers informed and to be able to track the health of anyone who is on campus, she has championed an app where users can upload their health information daily.

One member of this taskforce, a staff member of the Information Technology Software and Services (ITSS) group has recently approached her with another innovative technology that can address one of the shortcomings of the app, which is that users have to proactively submit their information and there is no way to capture their health automatically. Even though the university is thinking of taking people's temperature as they enter buildings, this approach will require manpower and it might be too late if someone has been on campus for a while already and interacted with others. The new technology uses facial recognition to identify if someone is on campus and then quickly looks them up in the app database to map if they have entered their information. If not, they get a notification on their phone and security is alerted to their presence and where they are on campus.

Although Trisha is appreciative of the power and possible usefulness of this technology, she is a little circumspect of the privacy, bias, and discrimination issues that she has read about. For instance, she is unsure how to balance the pros and cons of this solution especially since facial recognition technology and solutions for analysis are changing fast. She knows that a lot of parameters must be looked at and examined in depth if a good solution must be reached regarding the usefulness of this potential solution. Consequently, she has asked her taskforce members to learn more about the use of facial recognition and then report back to her with their personnel recommendations about this solution and she has further instructed the taskforce to reach a consensus on their recommendation so that she can forwards with making this decision.

Each of you has been assigned one of these roles as members of Trisha's taskforce and today you are meeting to present your personal recommendation and why you suggest that and then discuss as a team to come towards some kind of consensus on your recommendation to Trisha.

Taskforce members:

Steve Smith is a Vice President in the Information Technology Software and Services (ITSS) group at AHU and has recently moved to AHU after a successful career in the industry. In his last job as Chief Technology Officer (CTO) of a small company he successfully led the migration of their legacy software to a cloud-based solution and is an unabashed technology optimist who believes that IT can solve almost any organizational problem and that once a solution has been implemented any problems associated with it can be addressed. No new technology, he is quick to point out, comes without some downsides that must be overcome.

Courtney Jones is an undergraduate student in organizational psychology and the vice-president of the AHU student organization. As part of her position, and because of her interest in wellness and wellbeing of fellow students, she represents the student body on this taskforce. Courtney is a frequent user of social media and has used it well to drum up support for causes that she believes in on campus and she has been vocal about safety of women on campus and around the campus. She had recently launched a major campaign against bullying on social media and had also campaigned for the COVID app when it launched.

Trevor Jackson is a professor in the Department of History and a member of the faculty senate. He represents faculty on this taskforce, is dedicated to AHU, and serves on many other committees as well. As a historian, he often takes a long-term perspective on issues and is often circumspect of technology-based solutions especially when he thinks there are other, and in his opinion simpler, ways of solving a problem. When the app for COVID was being rolled out, he was the one who pushed for self-reported data entry by the user rather than some form of automatic collection of information. He is often preoccupied with issues of surveillance and new limits on privacy due to technology.

Keith Hampton is associate vice-president in the Provost office at AHU and on the team that looks at student admissions and retention. He is worried that a perception that the university is not doing enough for student safety might impact admissions. He made sure that the admissions office publicized the COVID app and reassured students and their parents that AHU was taking all the necessary steps. He thinks a facial recognition software would make a huge impact in terms of publicity and will put AHU on the map when it comes to using technology to ensure safety during COVID. He is worried though where the funds for the technology and the cameras will come from and whether he will have to spend time trying to get permission from students to use this data.

Gloria Espinosa is a Senior Director in the Office of Equity and Inclusiveness (OEI) at AHU and in her role she works towards a range of efforts such as transfer agreements with community colleges, outreach in K12 schools, summer camps for kids that can assist with advancing AHU's mission to admit and support a broad range of students. She is naturally inclined to be skeptical of any effort that might undermine inclusiveness on campus and this includes technology-driven project. She had raised the question about access to smartphones and data plans when it came to use of the COVID app. She is worried that a facial recognition-based solution to COVID

detection and prevention might introduce other unintended problems with grave consequences for students and faculty.

Amelie Montaigne is Director of FaceAware, a non-profit, that works in the field of facial recognition with both the government and the industry. She is providing consulting for the taskforce pro bono. She is a renowned expert on the topic of facial recognition and was responsible for creating one of the first deployable applications of facial recognition, based on an algorithm she wrote, that she later sold to a large company. She has been a proponent of facial recognition and has seen the technology grow by leaps and bounds over the past decade. She is cognizant of problems with FR technology, especially security risks and algorithmic bias, but believes it is not the technology itself but how it is applied that matters.