Of all the case studies available to read from on this assignment, we felt that the article “Mentcare: A mental health support system” best reflected similar problems and approaches to said problems in a similar manner to that of what we would face for our project. The research area that we chose for our project is the video surveillance system used to detect anomalies. Although a mental healthcare system is in general, vastly different from a video surveillance system, it is the principles and methodology between the two that we believe to be most similar.

What we found to be insightful about the Mentcare system was that it was considered to be a “secondary safety-critical” system that, although decently accurate, didn’t have the authority to perform a task or present information without supervision or being doubled-checked by somebody in order to ensure the validity of the systems output. The Mentcare system is responsible for transcribing details of doctor-patient consultations and patient details to produce more detailed letters and reports. The system needs this supervision because transcribing from recordings has many opportunities for error; muffled voices, poor recording conditions, and human error in speech are just some of the many possible factors that could throw off a system from accurately generating a report, hence the need for a secondary safety-critical system rather than being fully trusted to perform without error.

How this applies to our area of research is in the “trust”, or lack thereof, that we will be putting into our surveillance system. In the scope of detecting anomalies through purely video footage, it would be unwise to trust just a camera as the only input source for the detection of something; as there are many factors and external variables that could interfere with the accuracy of video surveillance detection, no matter which specification we choose to head down in this area of research. Similarly, in concept, to Mentcare, where they used human supervisors to validate the output of the Mentcare system, we would include a secondary system that uses a different method to measure for the same results, in order to cross-reference the 2 systems in the event that our surveillance system thinks it has detected an anomaly. Even in a perfectly lit room with little to no moving, or structurally complicated objects, video surveillance detection can never be 100% accurate, therefore adding a second measurement device that uses a different method, i.e: an air quality measurement tool paired with a system to detect gas leak anomalies with an IR camera, or a motion detector paired with a standard camera to detect trespassing on private property. The experiences mentioned in the Mentcare article has an overarching theme of redundancy to ensure security and accuracy, and we believe that a similar approach to our field of research for our project would yield the best results

In conclusion, we believe that the methods applied in the Mentcare article will provide us with the most accurate measurements when applying a similar concept to our research project.