# Dissertation Proposal: Develop a Machine Learning Application that is Able to Detect Real-Time Anomalies in User Behaviour.

## Motivation

In the United Kingdom an estimated 4.2 million surveillance cameras watch us every day (Clive Norris & Michael McCahill, 2006). Found in businesses, homes, shops and on high streets we are one of the most watched nations in the world. CCTV is actively available in 96% of homicide investigations, where it added value to the case 80% of the time (Scotland Yard, 2010). However, this statistic does not hold true for all crimes within the UK, with reports showing that CCTV only solves only one in every thousand crimes. (Press Association, 2009) It is fair to say that the work force allocated to high profile crime makes it possible to find, collect and search all the archived video footage for evidence. This illuminates the problem at hand; CCTV is solely deployed in a traceability capacity when it has the potential to provide a much richer source of information. This could lead to earlier crime detection and reduce the need to store such vast amounts of video footage.

Move on to speak about what the problem is and how it needs to be solved, then do a paragraph about what I plan to achieve and in what context I will be applying this.

//why project worth doing?

//what is the problem it is trying to solve?

//which need is being addressed? (not sure what this means)

## Aim and Objectives

//what will project try to accomplish?

//which key objectives will need to be achieved to realise the overall aim or prove/disprove your hypothesis?

## Background

//a table summarising key background sources and identifying their relationship to the project at hand

## Project Plan

//activities Gantt chart bullshit

//description of what has been done so far? Why is the plan structured this way?

## References

Clive Norris, Michael McCahill; CCTV: Beyond Penal Modernism?, The British Journal of Criminology, Volume 46, Issue 1, 1 January 2006, Pages 97–118.

Retrieved from <https://doi.org/10.1093/bjc/azi047>

Scotland Yard (2010) CCTV in Homicide investigations.

Retrieved from: <https://goo.gl/oS5Tgn> (Accessed: 15th November 2017).

Press Association (2009) 'CCTV cameras help to solve one in every 1000 crimes', The Independent, 24 August

Retrieved from: <https://goo.gl/cRnpaE> (Accessed: 15th November 2017)

//Motivation and Aim take up one page

//Background can run to one and a half pages

//Project plan one and half pages