The problem that we are addressing is the problem of social media monitoring and the ethical issues that may arise from people being tracked through their social media accounts. The purpose for companies and people tracking what others do on social media can range from more innocuous things like using it to develop targeted advertising on someone's Facebook or Instagram feed to more sinister things like selling consumer data to foreign governments that bid the most money. What we would like to do is to propose an application that will monitor social media platforms using artificial intelligence and help the government, namely the Department of Homeland Security and the intelligence agencies like the CIA and FBI, to detect possible threats to security and prevent them. As the technology of the world continues to advance and become increasingly complex, there will always be malicious actors who wish to do harm to others for their own self gain, which is what this artificial intelligence will aim to help combat.

We know this is a problem because cyber attacks are all too common in today's world and there are even wars being fought between the nations Iran and Israel using primarily cyber-attacks to try to harm the infrastructure of the opposing nation. Data breaches are another prevalent issue in the business sector with retail giant Target and tech giant Sony being on the receiving end of data breaches in 2013 and 2014, respectively. Now while this proposed application might not be able to detect and weed out the most high-profile cyber-attacks on its own due to the magnitude of the funding and ability of the hackers involved, we hope that it might be an aiding factor in using knowledge intelligence agencies have gained to keep an eye on potential suspects for any sort of suspicious activity.

So, we plan to create the framework for an application that would utilize artificial intelligence to monitor social media platforms for activity that might indicate potential security threats, mainly in the cyberspace environment, but also physical threats as well. We would aim to make this application flexible so that it can be used for more general monitoring as well as being able to single out certain people who the government might want to gain more complete data on. We could also design it so that it is able to use varying filters in order to track certain geographic regions or potentially certain age ranges that the government might be seeing trends in. Essentially, we want this application to be another tool that can be used by agencies like the Department of Homeland Security to scan for potential threats and flag prospective targets.

There will of course be different barriers that we might face with not just the design phase but also trying to toe the ethical boundaries of what this application is likely to be used for. The obvious, glaring moral dilemma is the right to privacy problem. It is an open secret that the government is able to acquire the information

they want to get about a person because of the overwhelming amount of resources at their disposal. So would another tracking app become an additional cog in the governmental information-gathering machine, or could we potentially design something too effectively that it is moving us closer to Batman's omniscient tracking technology Brother Eye? Many people paranoid of the government watching them will be profusely opposed to the idea of yet another technology to aid in the government's oversight. Another barrier that we might encounter alongside the ethical side of things is the technical side. Designing an application is an arduous process and can take many years to bring to a ready-to-release state. This is why we are going to start by just making the framework and exploring the realm of possibilities that using artificial intelligence opens up for us. There are likely going to be other speed bumps that we will encounter during this process but these are the two I see as our greatest mountains to scale.

The big question when designing any product or coming up with a new innovation is how will we measure our success? I think the best way of measuring success of the application framework will be what other people think about it. Since we are not going to fully develop an application without knowing there will be advocates for it once it is released, it is important to make sure people are on board with our idea and that they have reasonable faith that it could be made to work. Another important measure of success in the design is measuring the feasibility with the materials available to us. We cannot design something for which there is not adequately powerful technology available, so first ensuring that we would be able to take the application into the development phase is an important measure of initial success.