Abstract

IMB Classifier:

Human trafficking is a growing issue in the United States, and it happens more frequently than the public is aware due to little media coverage on the matter. Most of the human trafficking that occurs in the US is through illicit massage businesses (IMB), which are commercial sex operations masked to appear as a massage parlor (Keyhan, 1). After a long and laborious process of collecting information from massages businesses in the state Florida, a data base was created to implement machine learning and data analytics to be able to predict and find unknown IMBs. We trained a machine learning model to assign any given massage business a risk score 0 to 100, 0 being very unlikely of illicit activity and 100 be very likely of illicit activity. After the data base was made and the machine learning model had been trained, we tested close to 3,500 different massage business all throughout the state and found over 600 massages that had a risk score of 90. The IMB Classifier will be a valuable tool for law enforcement to use and be able to make an effective dent in the spread of human trafficking in the United States. We are currently working on implementing fully working Interface as well as expanding the scope of the IMB Classifier to include states like California and Washington.

Uniform Classifier:

Law enforcement often have trouble finding and returning lost children that have become victims of human trafficking. Sometimes in the United Kingdom, a child trafficking image will surface, and it will include some form of a school uniform. Knowing that close to 90% of all schools in the UK require students to wear a uniform, we figured if we were able to match the uniform to the school it could be valuable information in finding and returning the child. The Uniform Classifier will have a data base that will allow law enforcement to search through all known uniforms and provide a list of schools that match aspects of the uniform in the surfaced image. This allows a surfaced image with a uniform to be used as a clue to know where the child originally came from which will give them a great lead on finding the child. This project is still in development and we are currently filling in the data base that will consist of the schools along with the contact information and uniform details.
Reference

1. Rochelle Keyhan, Human Trafficking in Illicit Massage Businesses, Polaris (January 2018)