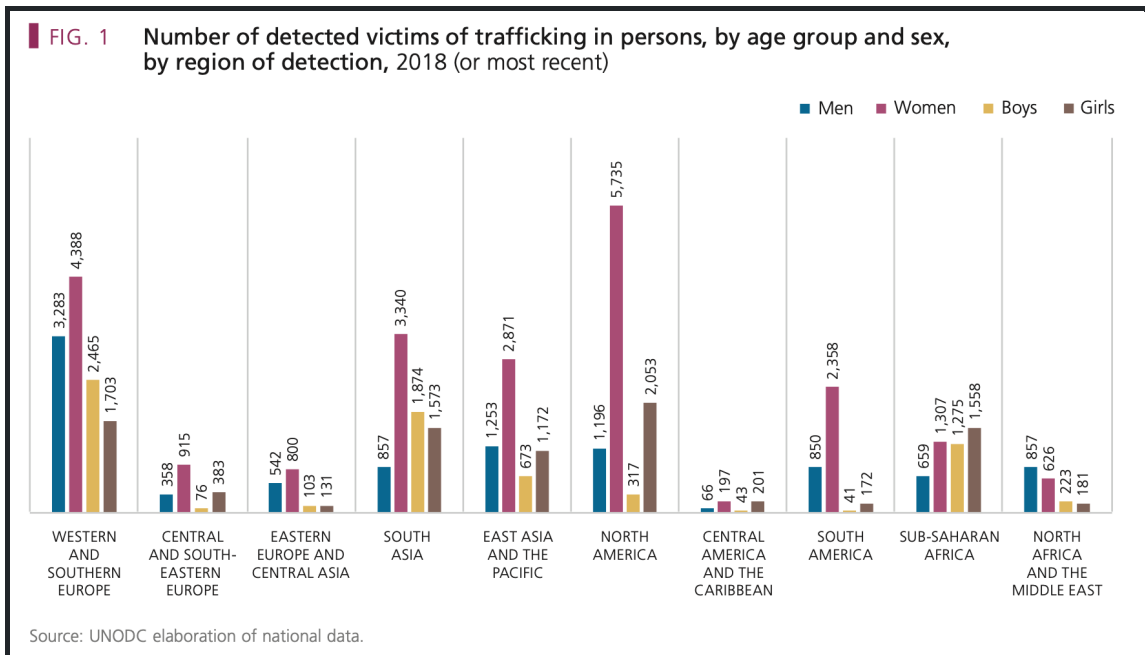# Product / Idea

The Problem
Human trafficking is a global problem and one of the world's most shameful crimes, affecting the lives of millions of people around the world.

FIG. 1 Number of detected victims of trafficking in persons, by age group and sex, by region of detection, 2018 (or most recent)

Source: UNODC elaboration of national data.

In India annually, approximately 50,000 children are reported to be trafficked for forced labour, sexual exploitation for prostitution, domestic servitude, forced marriage, etc . The actual victims are estimated to be much greater.

Source: UNODC elaboration of national data.
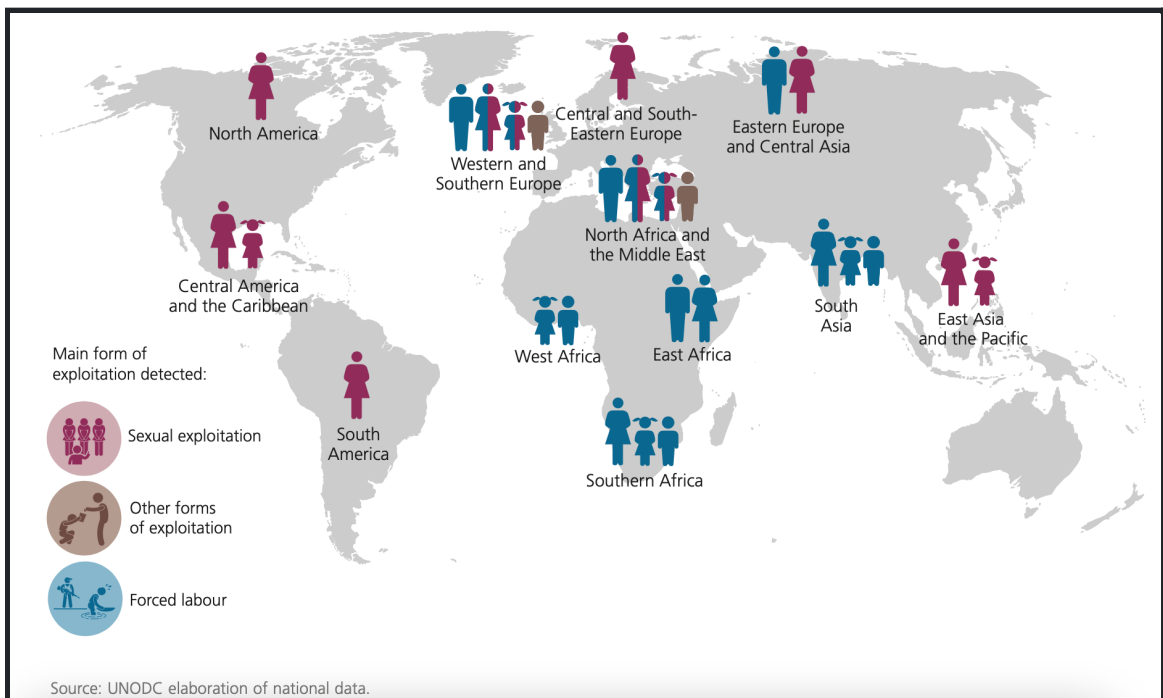
In order to improve this low level of recovery of missing children, we intend to create a portal which harnesses the power of artificial intelligence and machine learning and makes the process of searching and returning potential victims of human trafficking for police personnel easier and more efficient.

How does our idea address the problem

Once a missing child is found, police take a photograph of the child, and through the technology of facial recognition, we are able to trace whether a missing report of the child has been filed or not. Once we find the match, the concerned authorities are automatically informed which makes the process faster. Through this portal, we are also able to maintain a database of both the victims and traffickers, which police can use to narrow down searches, improve security and nab wrongdoers.

Target Customers

This portal is intended to be used by authorized personnel since we are dealing with confidential information which must not be disclosed to the public because if fallen into the wrong hands, it can completely destroy the purpose of the portal.

Uniqueness

Through the database we have created using this portal, we would be able to generate heat maps indicating areas where crimes like abduction of children for potential trafficking take place so that police are able to both improve security and act faster in case a missing report has been filed. The address and contact details of parents or relatives can also be found by using the Aadhaar enabled integrated information system, thus making search a lot more easier and faster even in cases where children are brainwashed by the traffickers to tell lie if caught by police or if the child does not remember his or her parents.

Revenue Generation Model

Since we are required to create a portal integrated with Aadhaar details for its use by authorized persons of the concerned authorities for greater good of mankind, the portal does not intend to have a revenue generation model built around it.

Geographies the idea is suitable for

This portal can be used by the police authorities of any state or union territory in the country, who will be able to access the missing reports, information about the solved cases, previously identified traffickers and potential victims all over the country.

Risks associated with the idea and their mitigation

Using facial recognition mechanisms might raise a fear of privacy breach. We can mitigate this issue by providing the access of the information to only the authorized personnels.

Who are the stakeholders involved in bringing this idea/product/service to the market? (Ex: State govt, Department of trade and taxes, pollution control board, Manufacturers)

Police authorities of the concerned states who will do the groundwork, state government which will provide the resources required in finding the traffickers and victims and the Central Government which is responsible to maintain the national database and management of fund transfers to the concerned state level authorities are the actual users of the portal as well as the actual stakeholders in bringing the idea to reality.

Intellectual Property Assessment

Is the idea patentable or patented?

No, the idea is not patentable.

Is the idea built on existing work? If so, how is it different?

The idea is new in terms of creating a national database of traffickers and victims of human trafficking which can be accessed by authorized personnels and used to tackle the issue of trafficking. The portal generates heat maps and also allows the police authorities to have a clear idea of the situation in a particular location.The idea of using facial recognition to make the search faster and minimize the risk of exploitation of children as a victim of human trafficking by using surveillance cameras, to scan for a particular face in nearby railway stations, bus depots etc.once a missing report is filed is fairly new.

Prototype / Proof of concept

What is the nature of the prototype/ proof of concept you would be able to submit?

We would be submitting a github repository, since we are required to provide a software solution to the problem.
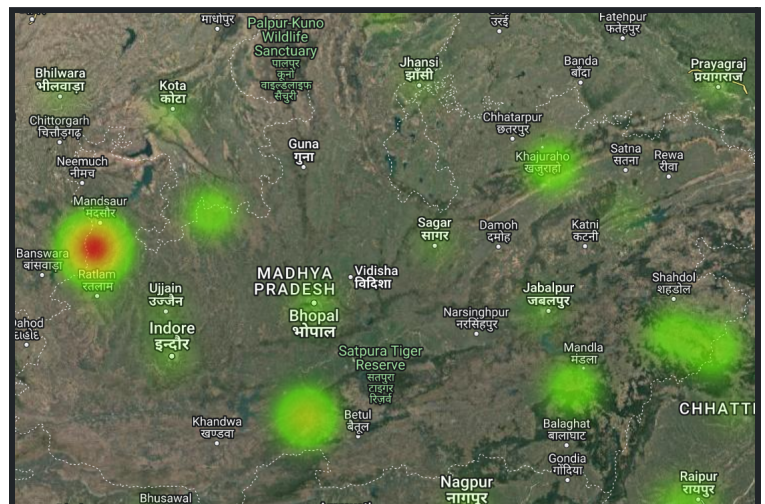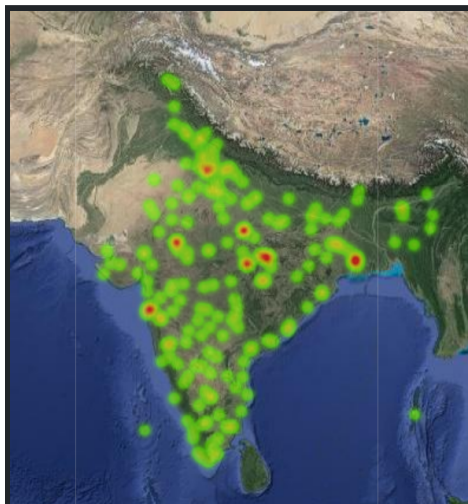
Have you completed pilot tests for your prototype/POC? If so please share.
We have run a few tests concerning facial recognition. The results are as follows:
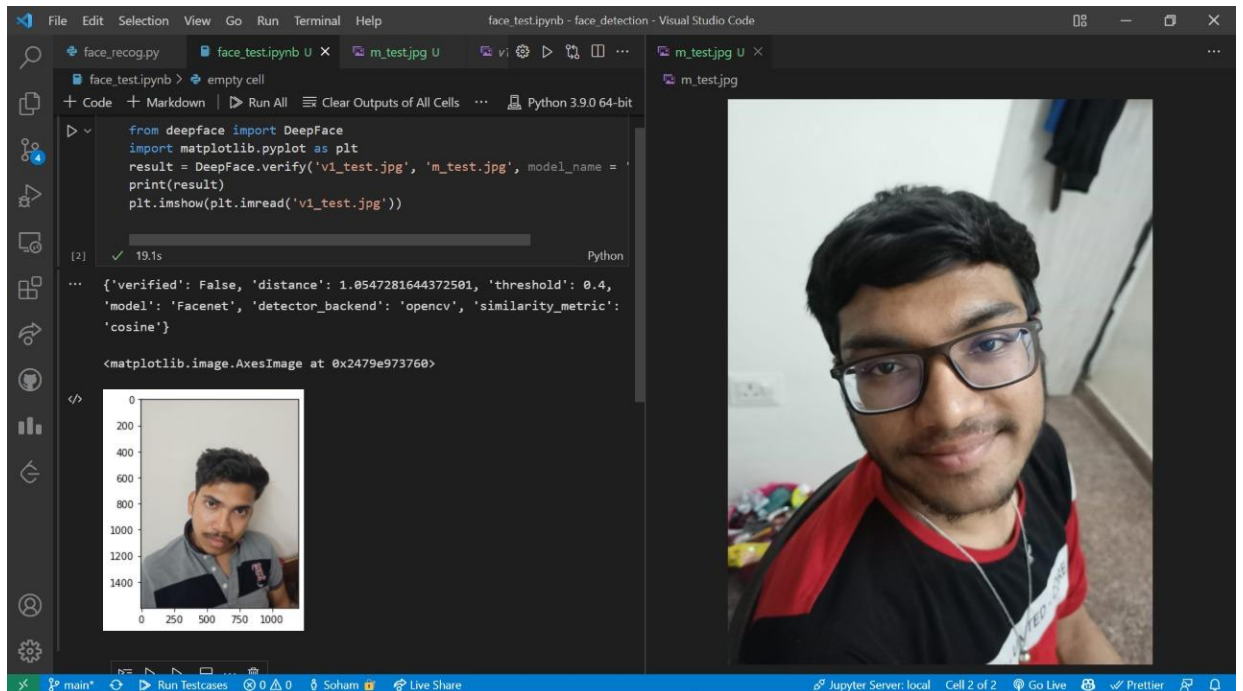
What is the approximate cost of developing the prototype?
The technological stack, APIs and libraries used are mostly open-source as a result of which there would essentially be no expense in developing the prototype.

Supporting Details

What regulatory requirements have to be met to bring the idea to life?
One of the challenges of this portal is to keep the data of victims as well as traffickers safe. There must not be any privacy infringement and the data must not fall into wrong hands. So, the data must be accessible only by authorized personnels. Blockchain and cybersecurity can be used in further versions of the portal to ensure the highest level of security.

Do you have a business plan/ commercialization strategy? If so please share.
What is a rough estimate of manufacturing/operational costs?
What is the volume of products/ amount of revenue you expect to make in the first year?
NA