

# SeeU

Making public places safe one frame at a time.



# Security Surveillance

Assistant software to  
fasttrack justice system  
PR430

## Manpower

Too much dependence on physical presence of individual for maintainance of law and order

## Cost

Maintaining law and order for an expanded system too high.

## Early redressal

On time threat monitoring with time and location stamp not present in present state.



# PR430

Team: BigBrother

Domain: Smart cities

Organization: Department of  
Science and Technology

Team Leader: Amandeep Kaur  
(2017UCO1616)

The problem is aiming at detecting unusual events from surveillance videos. All the videos are shot using single static camera.

## Use\_case

Traffic maintenance  
Safe streets  
Women safety  
law and order



# The Problem

Delhi

Is it Really safe as national capital?

1.9 Crores

TOTAL POPULATION

2,36,476

CASES REGISTERED

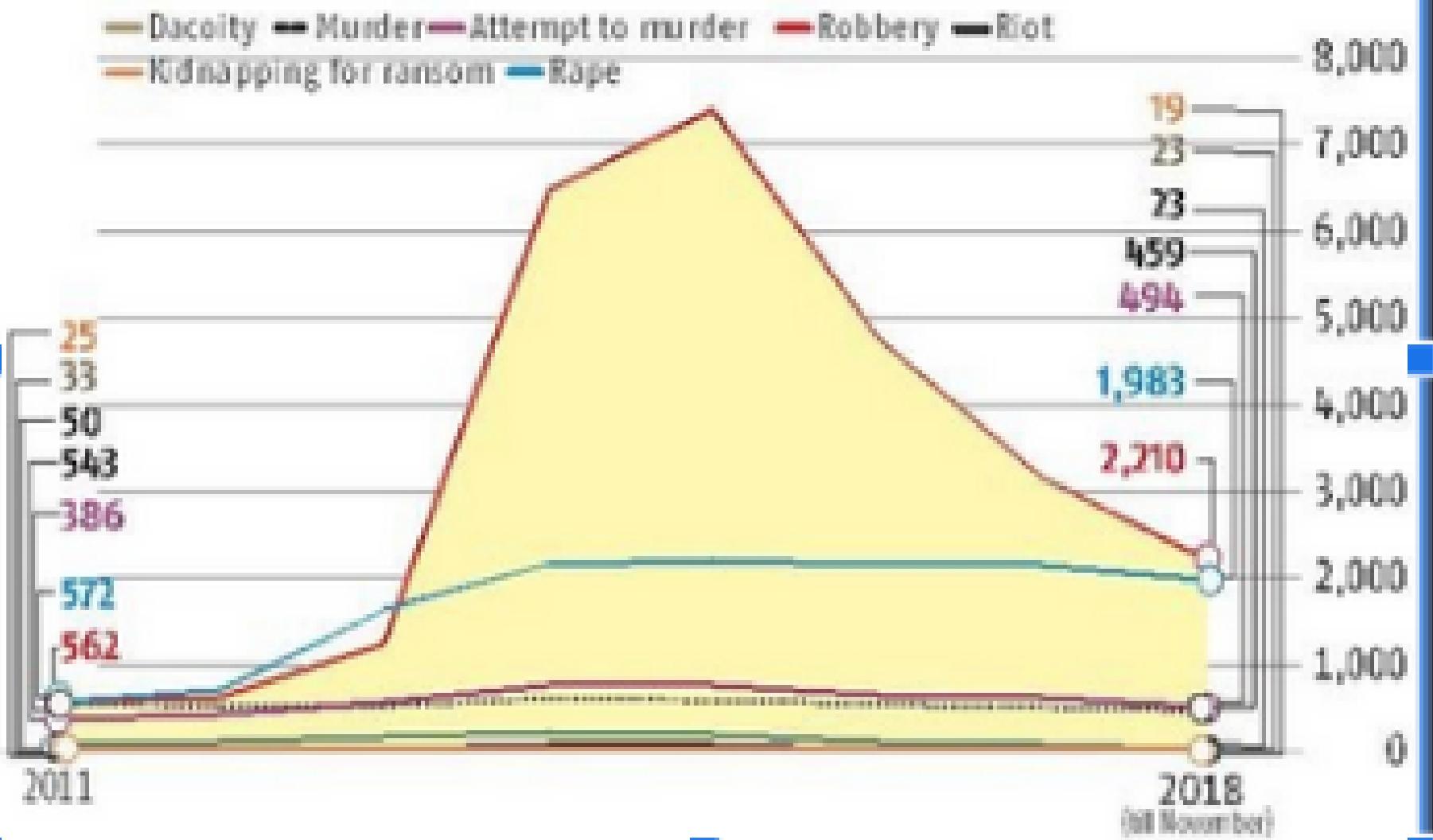
33 %

CRIME AGAINST WOMEN (NATIONAL CRIME  
RECORDS BEAUREAU DATA)

# Data

year 2018

## Is the national capital safer?



# MISSION

Use of technology and artificial intelligence is opening the gates to the future ,our model can play a major role so one gets hurt on our watch and changing the law enforcement system forever.



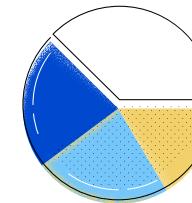
# Solution

Live Streaming +  
Location Time Stamp +  
Feature Detection



## Static Camera

SENDS VIDEO WITH  
TIMESTAMP AND LOCATION



## Web Server

SAVES LIVE SURVEILLANCE  
VIDEO AND USE AI.



## Anomaly Detection

GIVES A THREAT SCORE  
TO EACH FRAME AND  
VERIFIES FROM CRIMINAL  
DATASET



## On Time Response

IF THREAT TOO HIGH ,  
ALERT AUTHORITIES FOR  
APPROPRIATE ACTION

# Tech Stack

1/2

Machine Learning:

Deep Learning  
TransferLearning  
CNN  
LSTM  
One Shot  
Learning  
Siamese Network

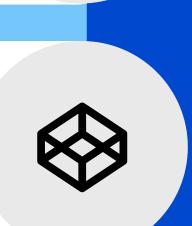


# Tech Stack

2/2

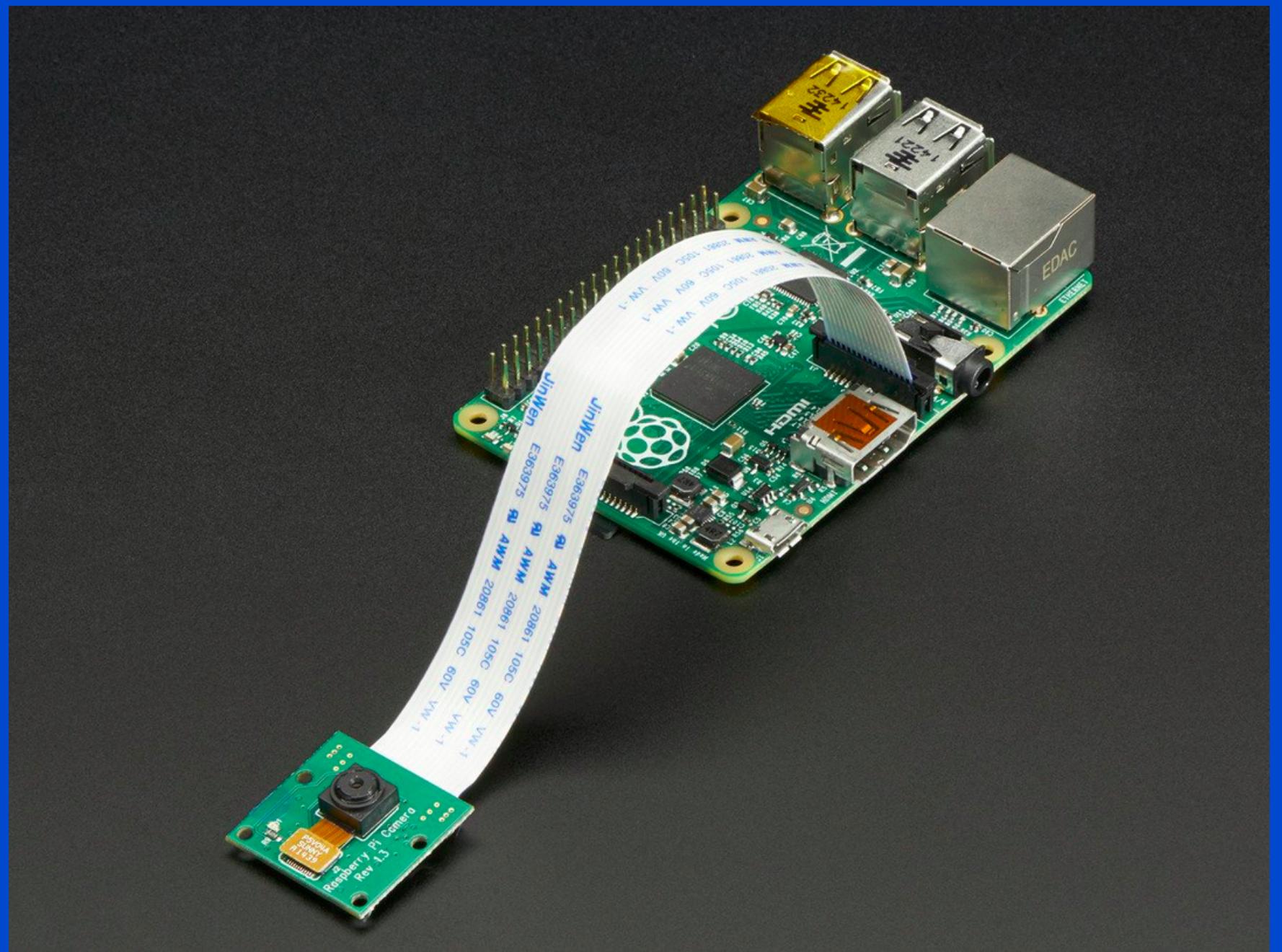
## Web Development

MERN  
IoT  
OAuth  
RTMP  
Ffmpeg  
NGINX



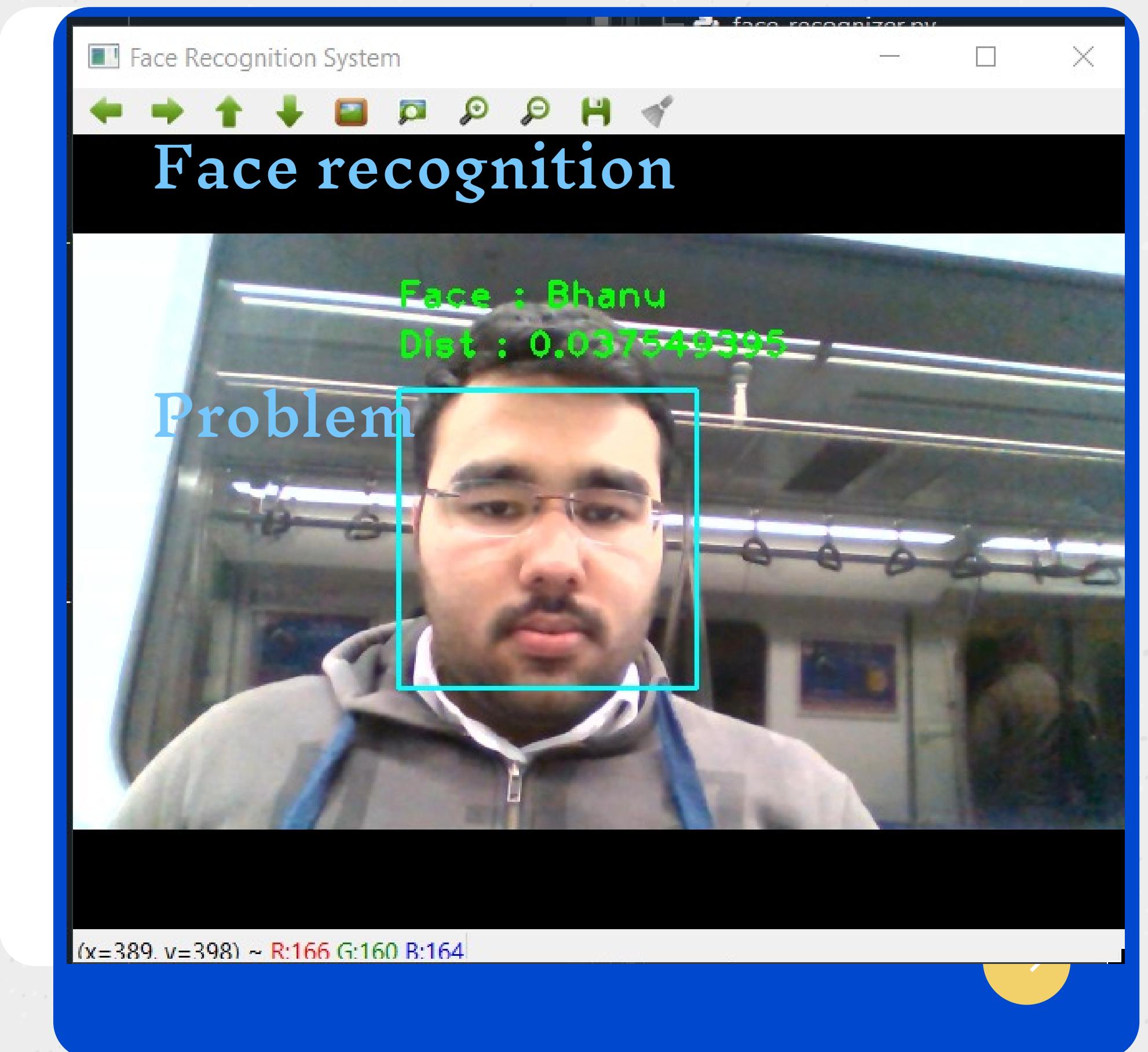
# Implementation (1.1)

One-shot camera used



# Implementation (1.2)

Screenshots from our work

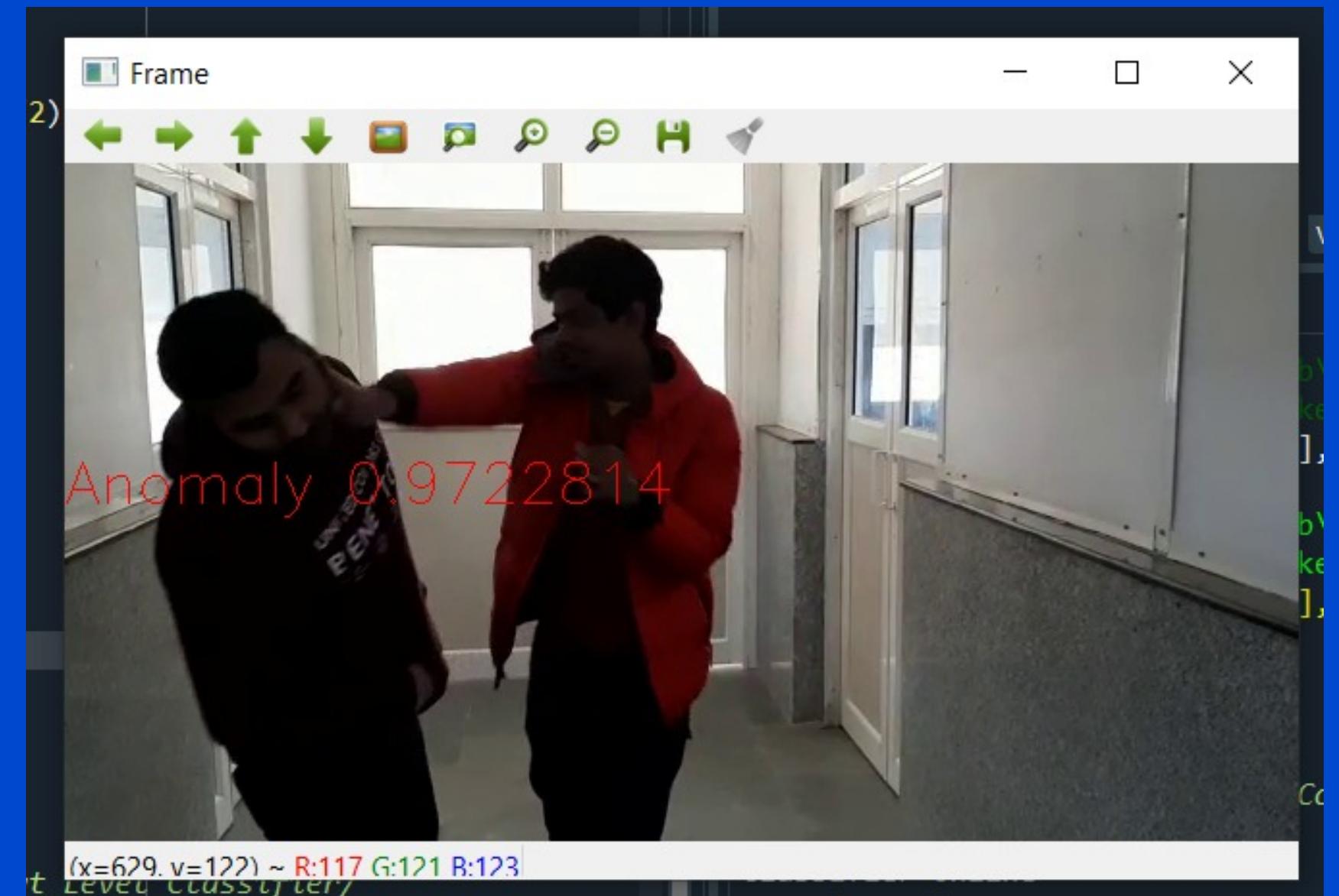


# Implementation(1.3)

Normal Score

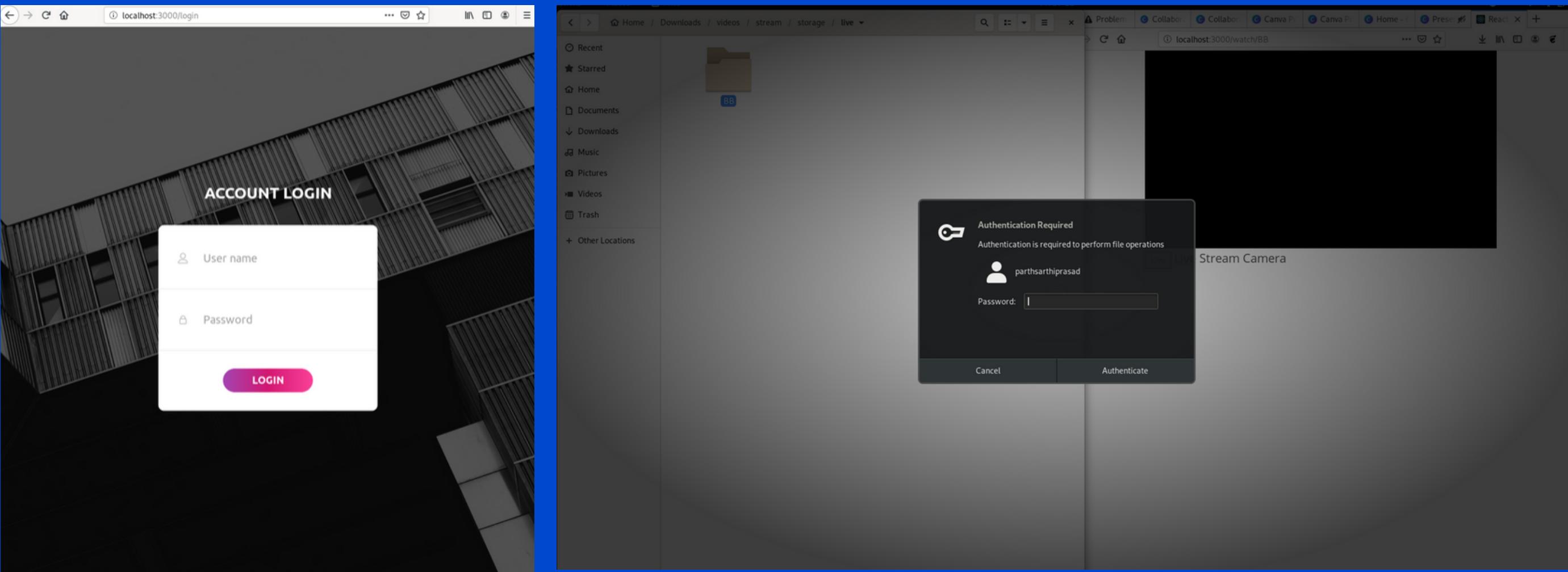


Anomaly(i.e THREAT)



# Implementation(1.4)

## WebApp Security



# Challenges

Security and false alarms• Operating in an unpredictable environment• Dependability of a computer vision based solution• Data storage• Access and management

## FUTURE SCOPE

- Edge Computing for faster processing
- Higher Security Protocols for Transmission
- Availability on multiple platforms



# Why US?



SeeU as a product with present use case can work to solve major problems be it security and threat detection ,

Already implementation present in countries like Australia and USA.

Faster and better approach of integration of man-power and technology in 21st century towards Smart Cities in India.

# Contact Us

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