



OBJECT TRACKING BASED **VIDEO ANALYSIS**

by TEAM REGEX



PROBLEM STATEMENT

Bank is using video cameras for the purpose of surveillance at many branches, ATMs and digital lobbies. Getting video analytics of different parameters from the video recording will help the bank to resolve many operational issues at the branches. The bank wants to explore video analytics for understand the customer sentiments, understand the patterns /behaviors/actions in certain branches for proactive surveillance and provide better services to customers.




SOLUTION

The current aim is to develop object detection system, using openCV and mediapipe, by which numerous modules can be developed that includes count of people, tracking the suspicious activity, track the attendance and idle time spent of the employees which will improve and help the bank to function much better.



**Total number of
people present**

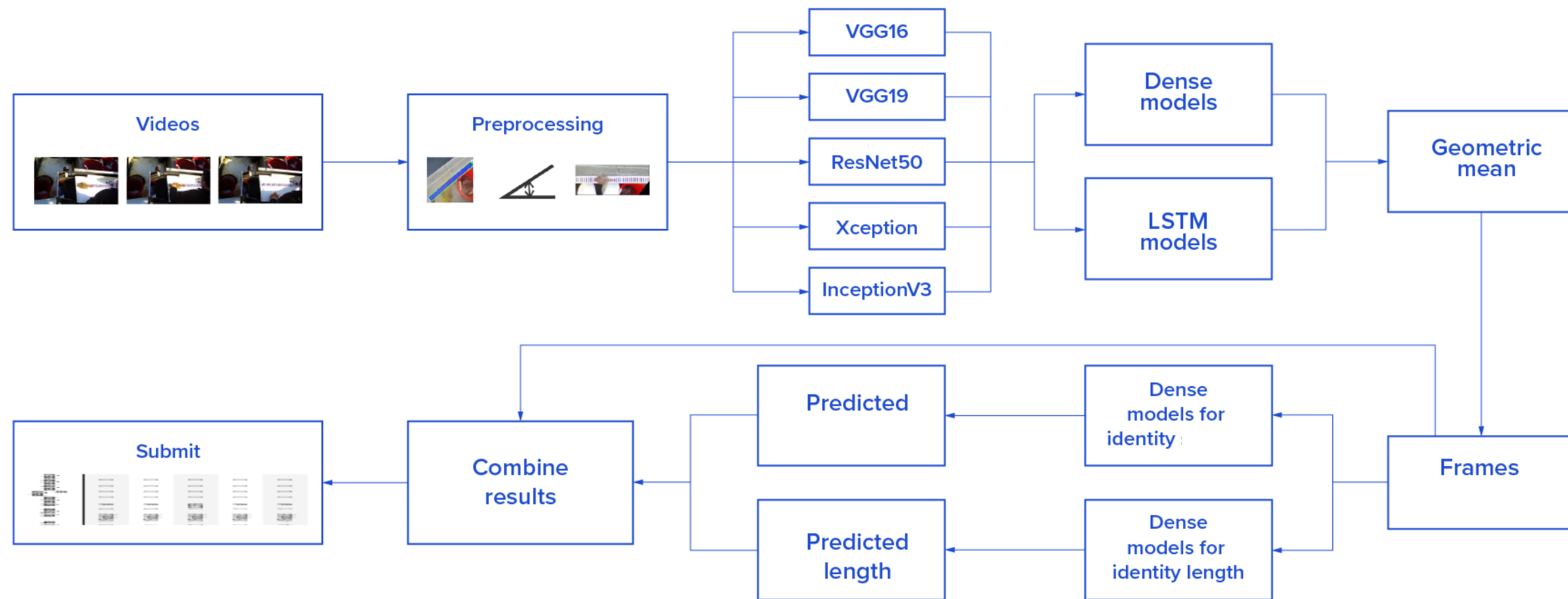


**Tracking the time
taken to complete
a task**



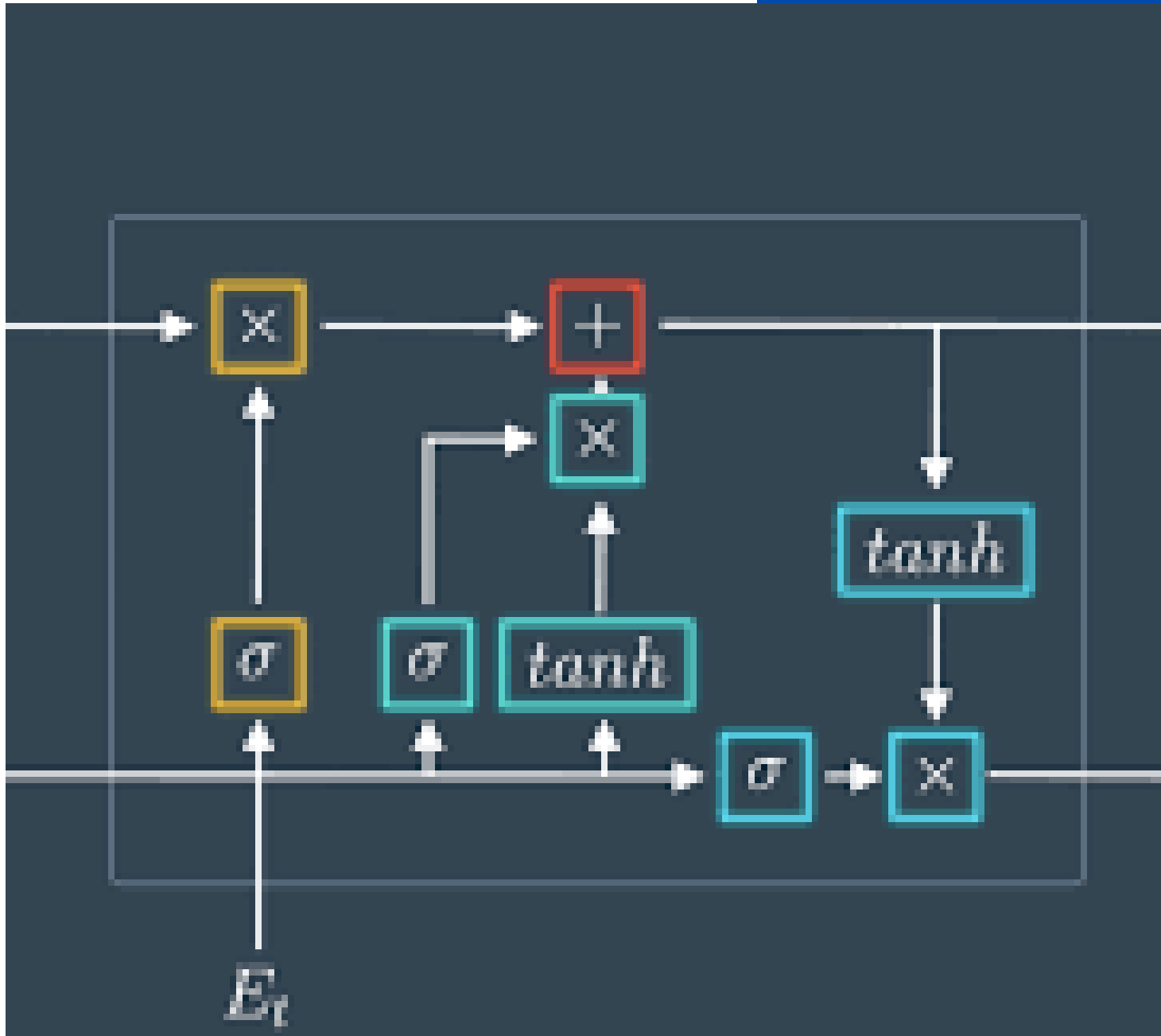
**Tracking the
suspicious activity**

FLOWCHART



ARCHITECTURE

The architecture used is residual neural network (ResNet) and we use LSTM (Long short-term memory) for timeseries analysis.



LSTM



TECH STACK

01

TENSORFLOW

03

REACT JS

05

NODE JS

02

COMPUTER
VISION

04

PYTHON

06

AWS
