



Intrinsic Detective System

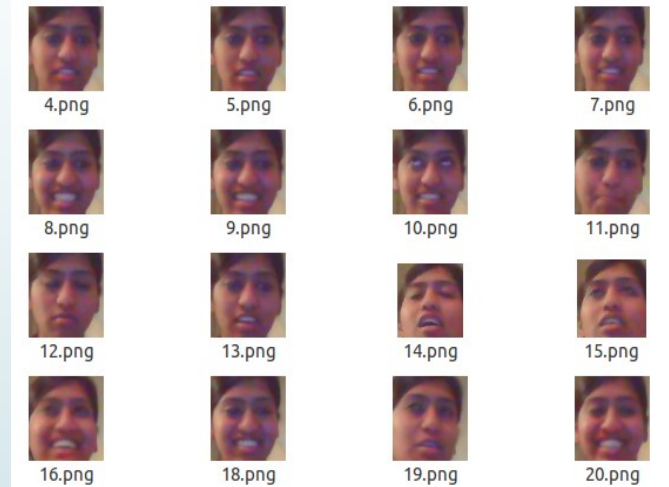
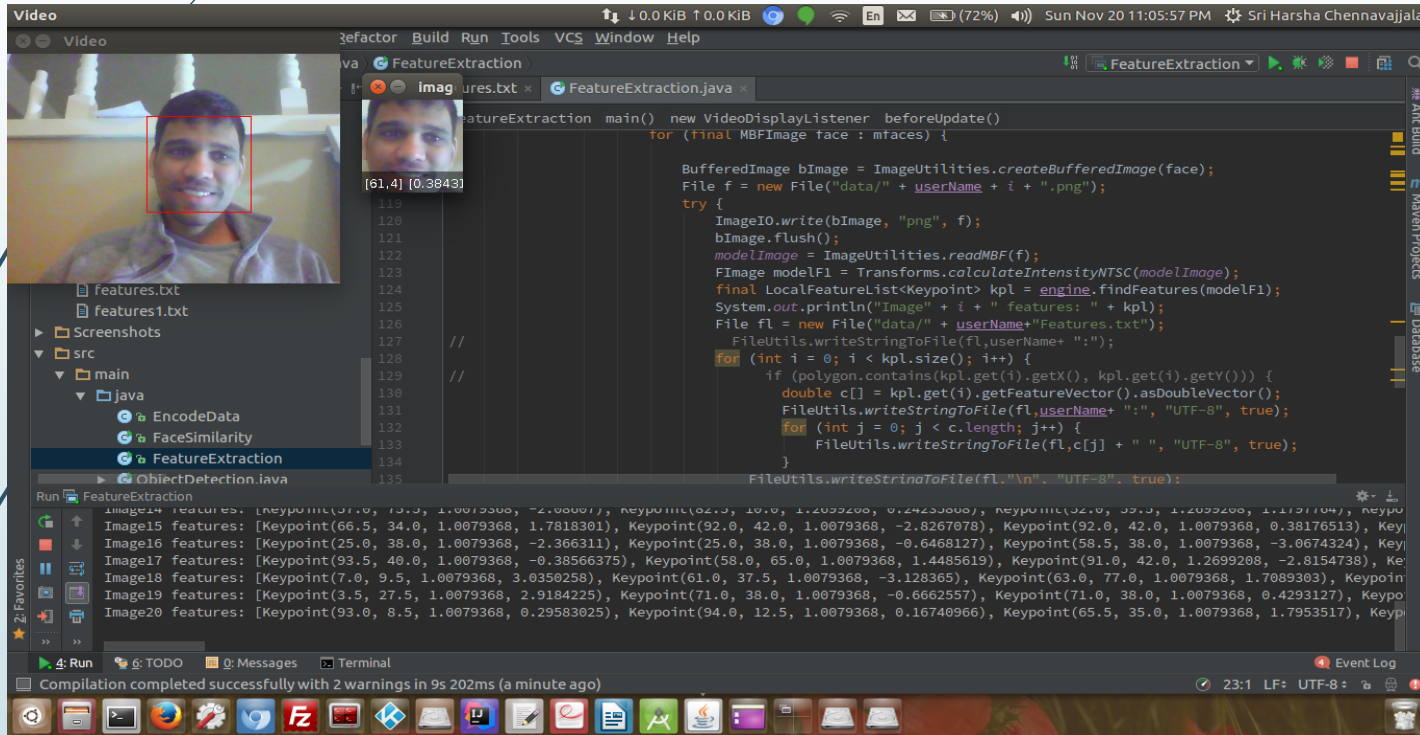
Sri Harsha (4), Priyadarsini (16), Tej Kumar (27), Chaitanya Sai (14)



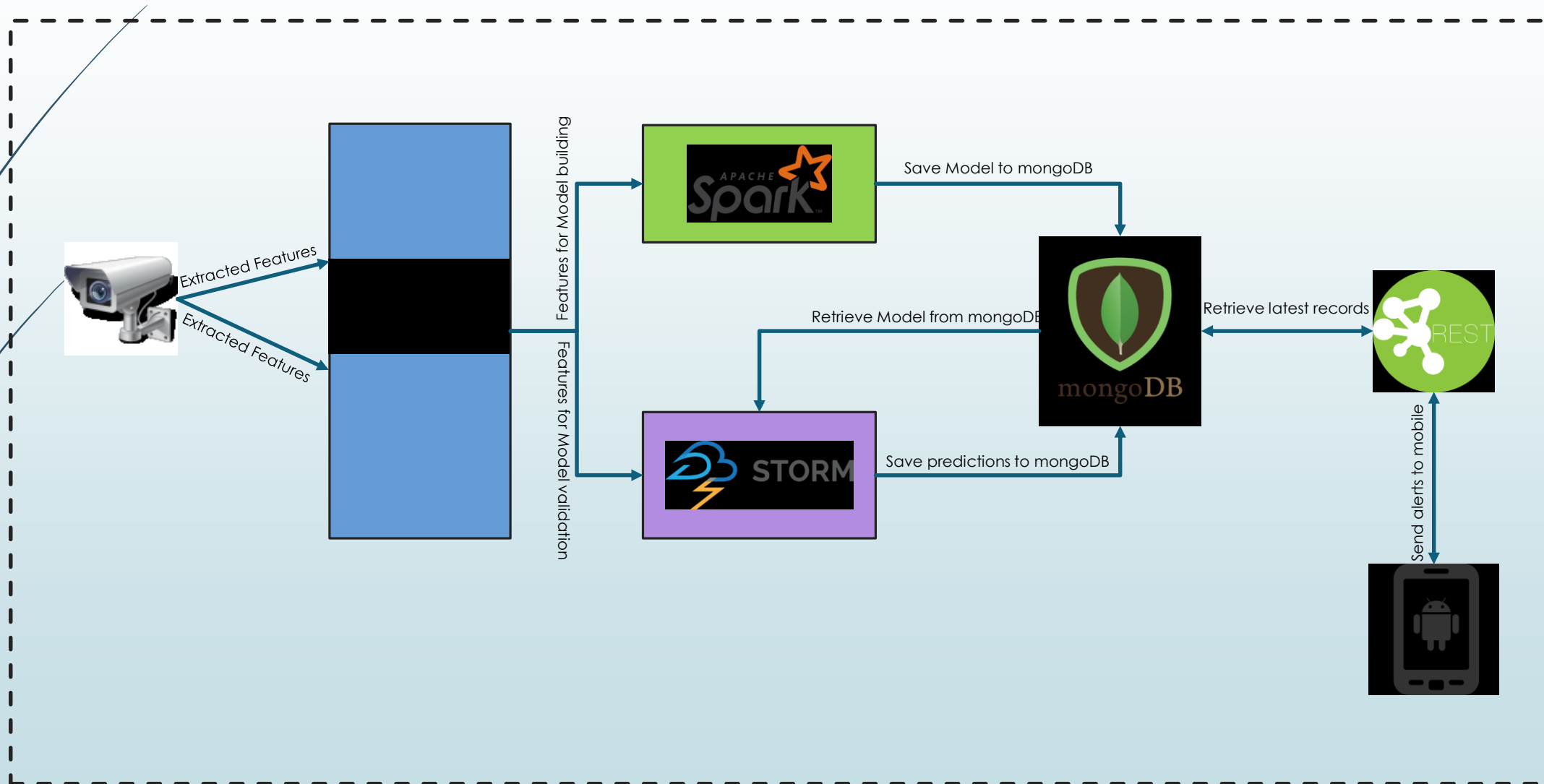
Introduction

- Our application main goal is to recognize the suspects in a stream of video and alert the security personnel.
- The tools that we used are:
 - **OpenIMAJ Framework** – to record and process the video, to extract features
 - **Kafka Messaging System** – to transfer the features reliably from client to Spark or Storm
 - **Apache Spark MLlib** – to generate a Decision Tree based model for the features dataset
 - **Apache Storm** – to process the received data streams in real-time
 - **Mongo DB** – to store the model and predictions
 - **nodeJS & GCM** – to develop a REST application to serve the messages to android devices

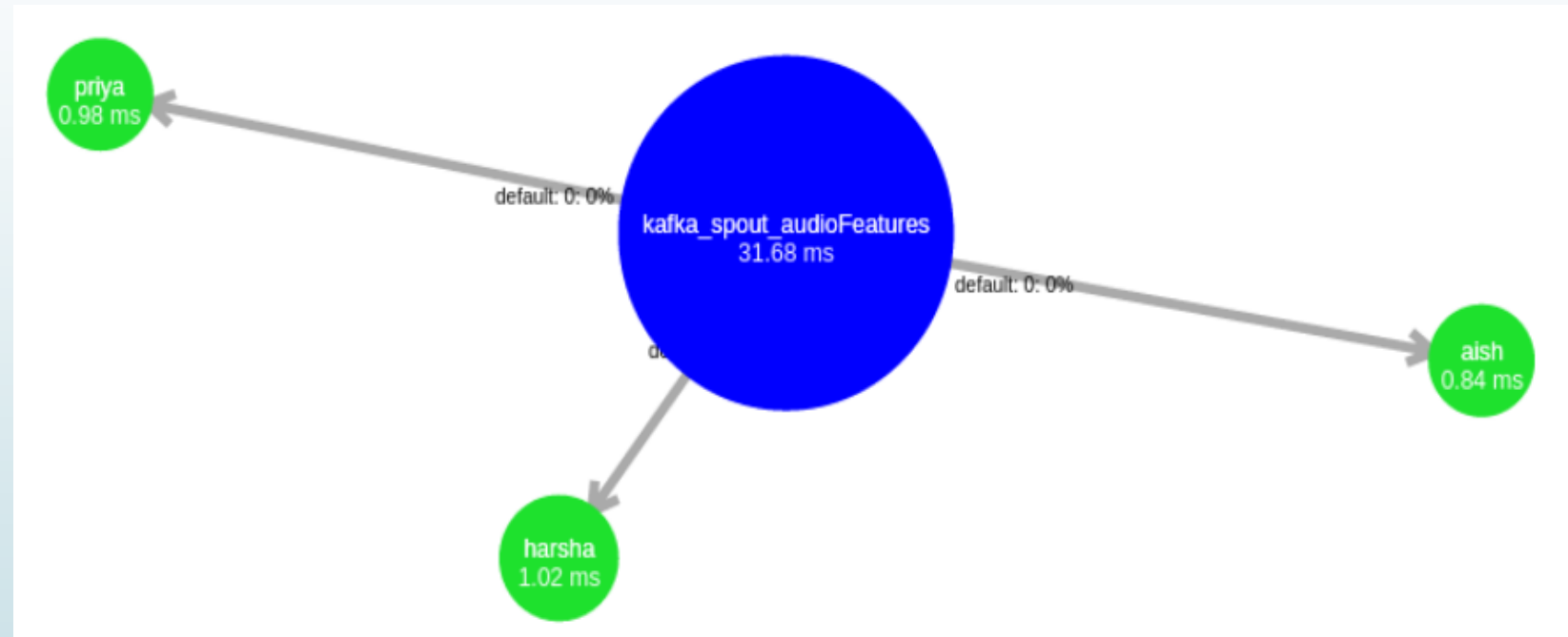
ROI and Feature Extraction



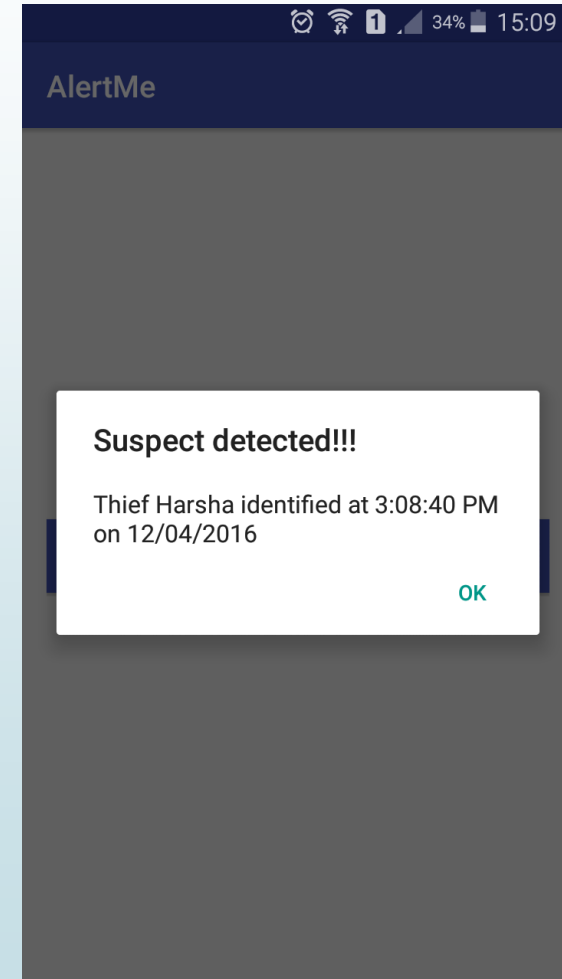
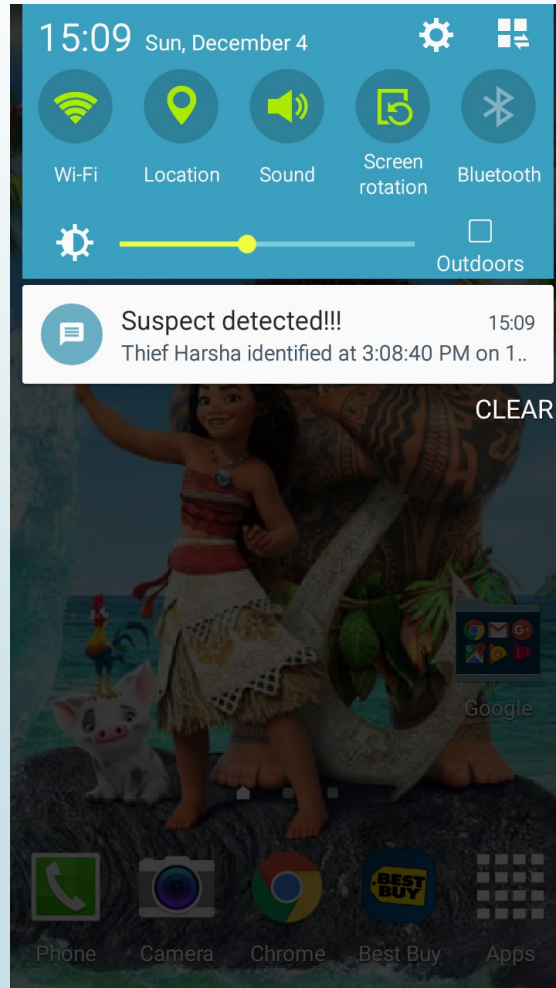
Architecture



Storm Topology



Android device alerts



Results

Confusion Matrix		Predicted	
		Harsha	~Harsha
Actual	Harsha	996	250
	~Harsha	173	375



Thank You