

Smart Student Check-In System

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CMPE 181 - IoT Platform

Final Project

Team 15

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Project Overview

- An online exam proctor application
- Check in student with **Student's Face** and **Student ID**
- Detect mobile devices and alert

Component Used

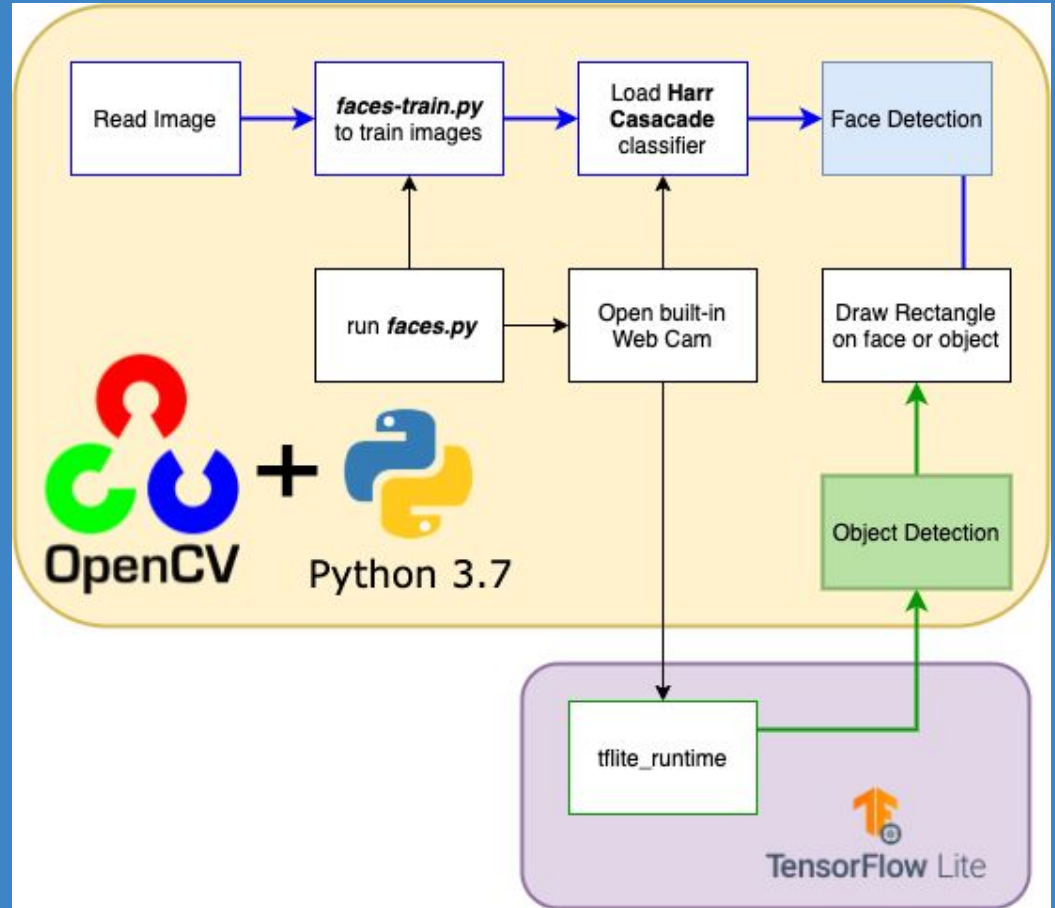


System Functions

- Able to recognize faces based on trained dataset/model
- Check-in students when the similarity is larger than 80%.
- Able to detect the student ID and recognize the faces on the ID photo.
- Able to save screenshots when the user click the 'S' button on the keyboard.
- Able to quit system when the user click the 'Q' button.
- Able to detect any mobile devices and show Alert message.

System Diagram

Present by
En-Ping Shih



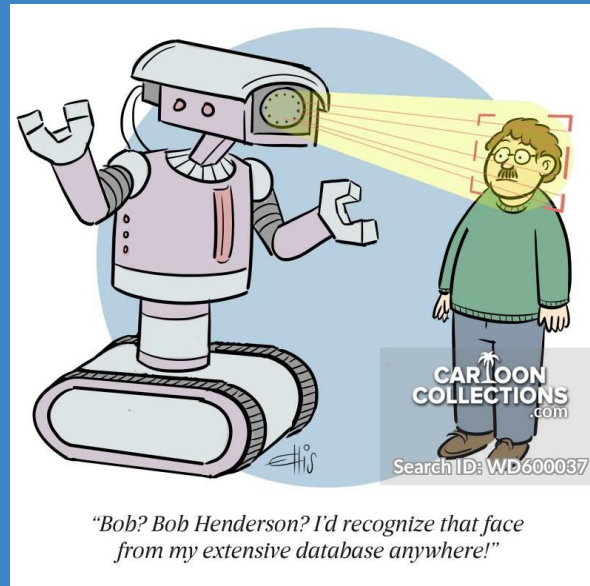
Challenges

Present by En-Ping Shih

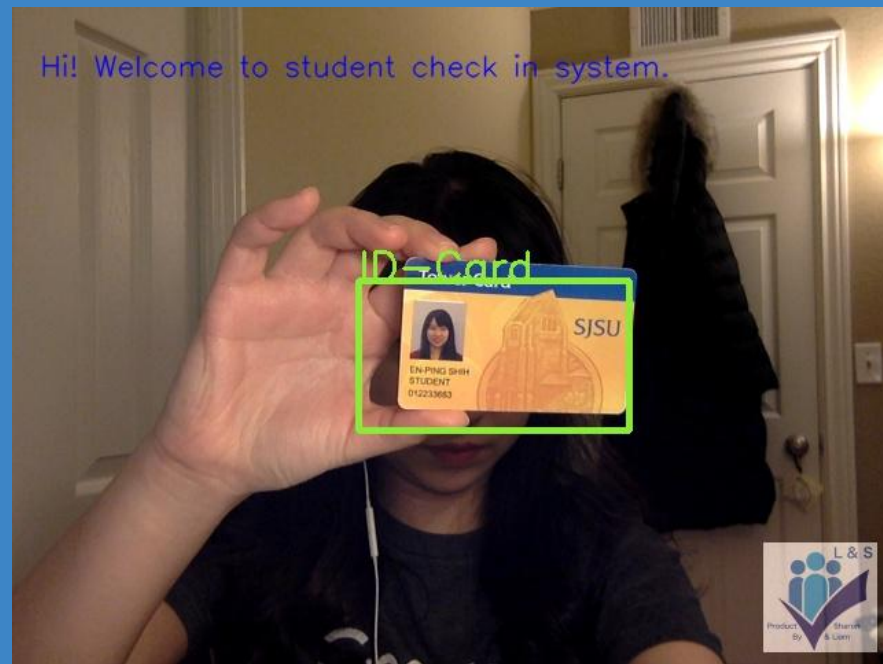
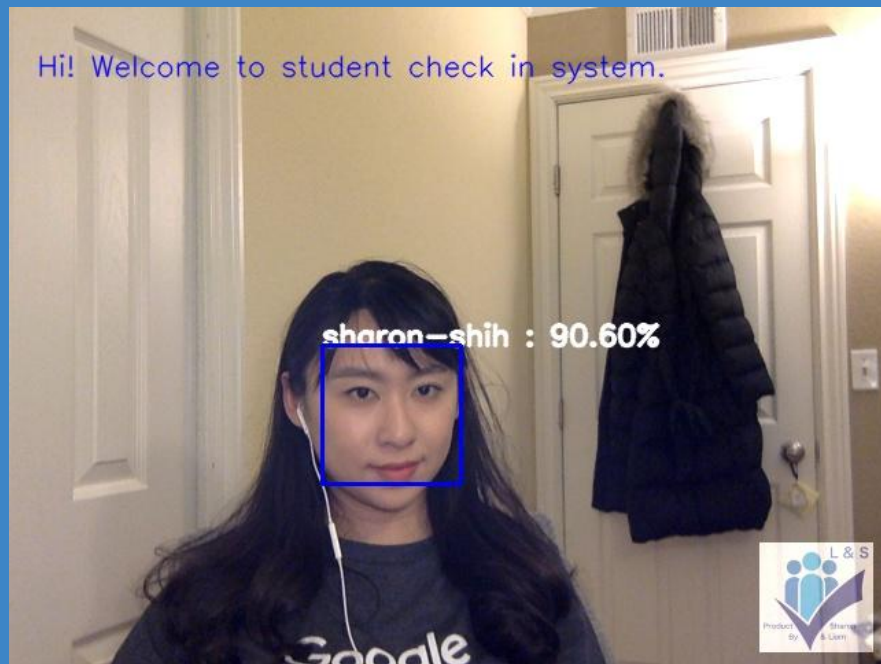
- Version 4.3.0 OpenCV cause some issue when installing (Python 3.8 is a very new version which also have some problem with it)

```
[Sharons-MacBook:python3.8 macbookpro$ pwd  
/usr/local/Cellar/opencv/4.3.0/lib/python3.8  
[Sharons-MacBook:python3.8 macbookpro$ python --version  
Python 3.7.7  
Sharons-MacBook:python3.8 macbookpro$
```

- Need a lot of photos to do the training
- Not able to scan the information on the card
- Working with each other remotely



Face Recognition & Object Detection



Live Demo!

Present by En-Ping Shih

Thank you for watching!

