

SECURE FACE ID SYSTEM

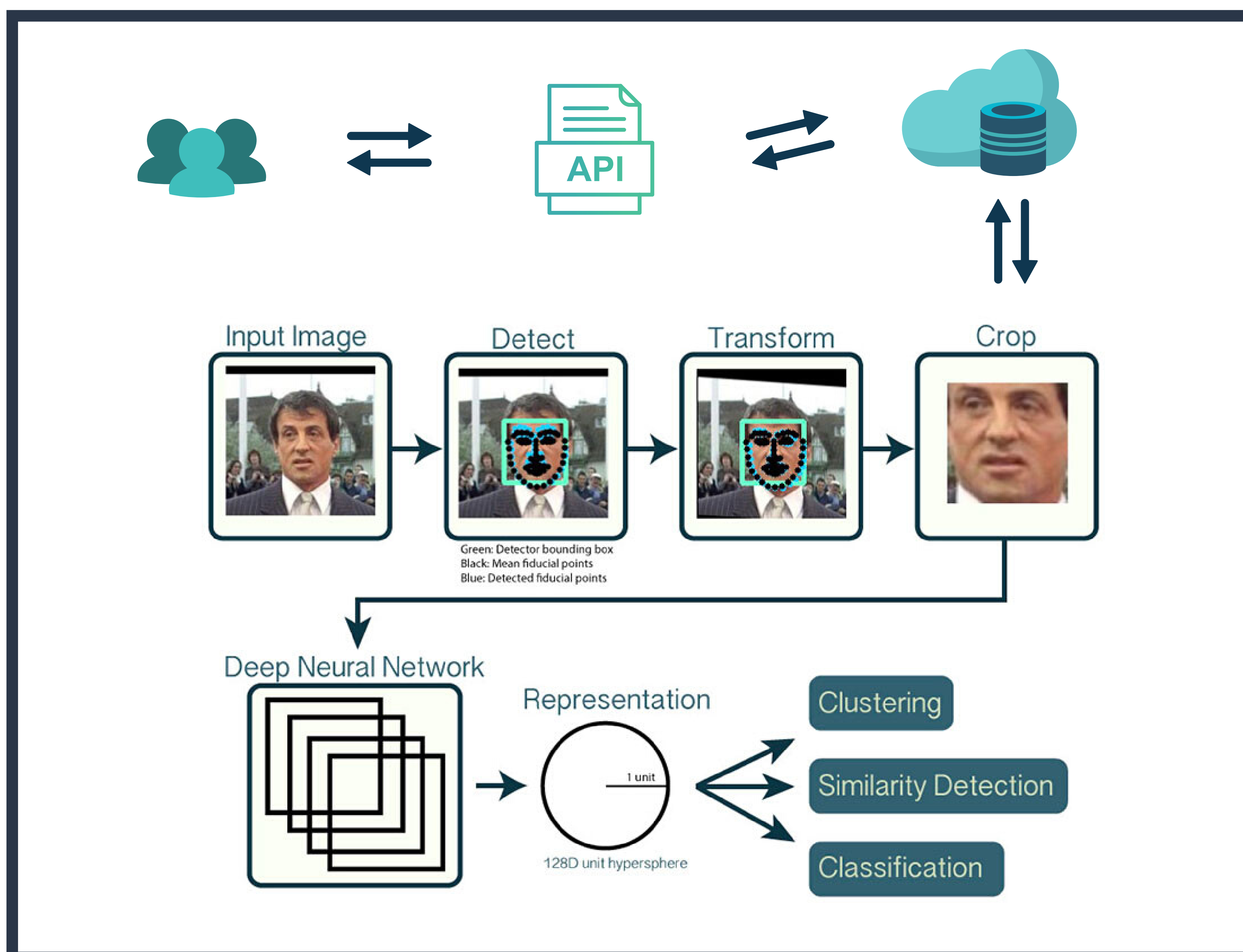
Shineun Yoon, Qing Han, Sharipov Yerlan



INTRODUCTION

As machine learning and especially computer vision becomes more ubiquitous technology, we leveraged state-of-the-art algorithms to create system for face recognition, which can be used out of the box. We built a facial recognition websites that can recognition faces in the images.

SYSTEM DIAGRAM



ATTENDANCE APPLICATION For Faculties & Students

Faster Attendance Checking System for Larger Audience

Same technologies can be applied for Libraries, Companies, Residents

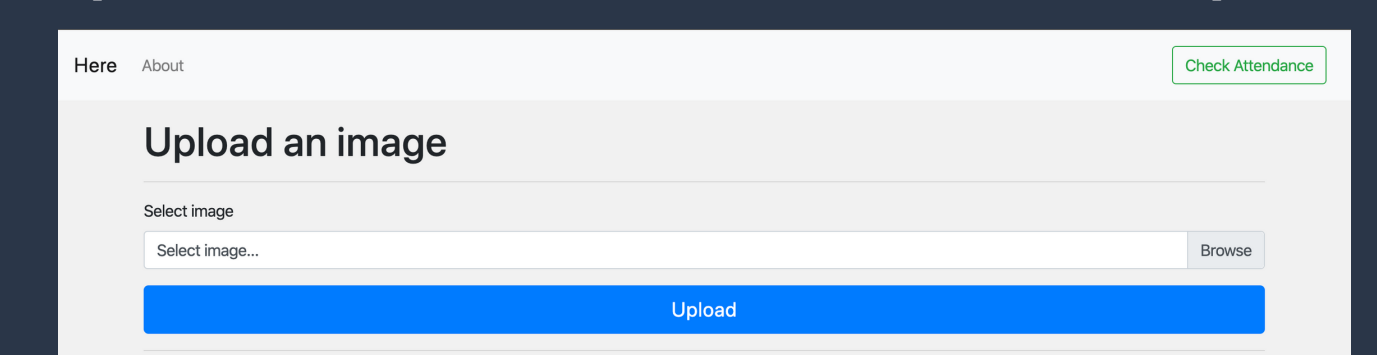
TECHNOLOGY

- **OpenCV**: OpenCV libraries is responsible to detect faces in the images and calculate 128-D face embeddings for each faces.
- **Deep Neural Network (DNN)**: The recognition is accomplished by feeding embeddings to Linear Support Vector Machine (SVM) Model.
- **Flask**: As the platform of our web.

HOW TO USE

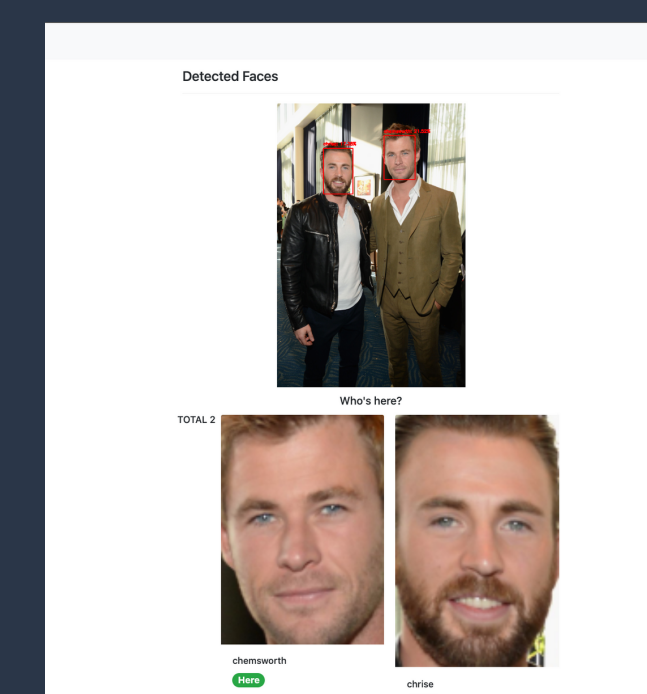
1

Upload or Take Picture on Your Phone or Computer

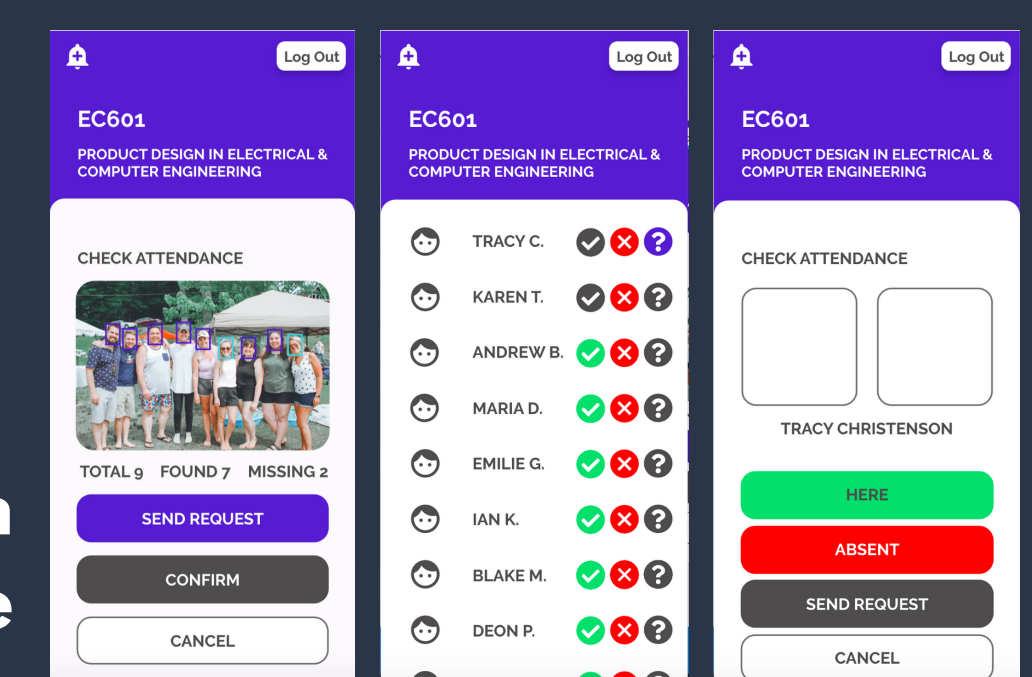


2

Tells who's who & How many people are there



Application Prototype



FUTURE PLAN

- Improve the website to make it more robust and versatile.
- Integrate all of stuff into an application: implemented to some extend but have trouble on API
- Increase the accuracy of recognition by comparing more models to optimize the recognition precess.

Detected Faces



Who's here?

