

# MUDetection Check-point Write up

Yicong Wu and Sibor Wang

According to our schedule, in last two weeks, we did research on matching method and draw flowchart, and also we designed data structures and definitions of functions. Besides, we programmed to detect all the faces in the image and used the camera to capture and display the processed images in real-time successfully.

What we are doing is exactly the same as we planned, and we have confidence about finishing all parts in the project on time.

Finally, we want to show that we can detect the faces in the front-facing camera in real-time and mark them with yellow rectangle, and recognize the main user's face among them with an orange rectangle. If the main user is the registered one, the color of rectangle will change to green.

Nice to have: we hope to give the application more functions, such as recording the time of continuous utilization, identifying whether the user is happy about the using experience.

## Schedule:

Week3 1<sup>st</sup> half ---Sibo: Check-point write up

Week3 1<sup>st</sup> half ---Yicong: Pick up all users' faces

Week3 2<sup>nd</sup> half ---Sibo: Try other methods to accelerate the real-time detection

Week3 2<sup>nd</sup> half ---Yicong: Program to pick out the main user's face

Week4 1<sup>st</sup> half ---Sibo: Optimize mouth detection to be more robust

Week4 1<sup>st</sup> half ---Yicong: Program to match main user's face with registered user's face

Week4 2<sup>nd</sup> half ---Sibo: Do tests on face matching part and make YouTube clip

Week4 2<sup>nd</sup> half ---Yicong: Do tests and optimization on whole process