

## Individual Contribution Report

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### Personal contribution to group project

1. Developed the alert module to send SMS and email messages, and exposed the functions as restful API services at the backend service;
2. Developed the backend service to provide the restful API services, so to enable the interactions between intrusion detection module, face recognition module and alert module;
3. Designed the integration architecture, and implemented the integrated application which started the intrusion detection, face recognition, and the backend service;
4. Performed integration test with other members;
5. Suggested and contributed the sample code using MTCNN for face alignment;

### What I have learnt

1. Learned the MTCNN for face detection and face alignment;
2. Learned the opencv for face recognition;
3. Learned the software integration for different modules;
4. Learned the Face Recognition implementation on the real environment;

### How I can apply the knowledge and skills in other situations

1. I would choose MTCNN as good candidate when there is the requirement on the face detection and alignment;
2. The integration with restful service architecture could also be applied to other systems or projects;
3. The opencv library contains much useful functions which could be applied such as: image processing, object detection and tracking, face detection;
4. The experiences and lessons learned at the project implementation on the real environment would also be applied for the future tensorflow python project.