Group 9:

Team members:

Nguyễn Duy (Leader)

Vũ Lê Quốc Hoàng (Member)

Nguyễn Minh Viêm (Member)

Nguyễn Ngọc Duy Quang (Member)

**Meeting Minutes**

Capstone Project name:

**English**:Automatic Attendance System: issue of a partial face recognition.

**Vietnamese**: Hệ thống điểm danh tự động: giải quyết vấn đề nhận diện một phần khuôn mặt.

**Abbreviation**: AASPlus.

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| Date | PROGRESS UPDATE | PLAN FOR NEXT WEEK |
| Mon Week-2 15/01/2018 | Set up environment: install Python, OpenCV. We found some necessary papers and set overall plan for our research. We wrote report 1 - Introduction for Capstone Project Document. | Research basic principles of face recognition, Python syntax, machine learning and deep learning |
| Mon Week-3 22/01/2018 | We get to know the basis knowledge of Python, OpenCV library and understand input and output for our face recognition model.  Finishing writing report 1. | We divided team into 2 teams to research 2 approach methods:  CNN and MKD-SRC. Viêm and Hoàng will research for CNN;  Duy and Quang research MKD-SRC algorithm. |
| Mon Week-4 29/01/2018 | Team CNN: understand ANN. Knowing definition of neural: + Activation + Weight, bias + Types of layers:   - Input layer  - Dense or full-connected layer  - Output layer + Gradient descent + Lost functions + Learning rate +Initialization + Learning progress, learning formula. Team MKD-SRC: Understand flow of MKD-SRC | Summary and choose a method to use and concentrate on that model. Write the report 2 for Capstone Project Document |
| Mon Week-5 05/02/2018 | We decided to choose CNN method to solve problem .We share the knowledge about Neural network and research for CNN include:  + Convolution layer + Max pooling layer + Flatten layer + Softmax layer. The report 2 was finished | In Tet Holiday, we write introduction and prior work for our paper. |
| Mon Week-6 26/02/2018 | We wrote Introduction and Prior Works parts of paper. Decide the model for our project. Implement the FaceNess-Net and face recognition algorithm | Drop FaceNess-Net and concentrate on recognition parts because of time limitation. Planning to implement face recognition and demo desktop application. Prepare for next report of Capstone Project Document. Go to team building to solve our conflict. |
| Mon Week-7 05/03/2018 | Downloading dataset to training data: Face Scrub dataset and VGG1 Dataset.  Use AlexNet to training data, however the accuracy of this network is not too high. | Research for Inception and ResNet, |
| Mon Week-8 12/03/2018 | Define the definition of Inception and ResNet: + How the inception and ResNet work + Advantage of the inception and ResNet Implement the Inception-BN to train | Know how to enhance the partial face recognition Write report 3 |
| Mon Week-9 19/03/2018 | - Wrote report 3 - Design GUI of Automatic Attendance System - Implement the Inception ResNet to train dataset - Augmented the dataset by occlusion | Continue to finish the application Understand and implement transfer learning |
| Mon Week-10 26/03/2018 | - Finish core function:  + Insert staff  + Check Attendance + Training - Implement the transfer learning to network | Write report 4 and paper, continue to finish the application. |
| Mon Week-11 01/04/2018 | - Wrote report 4, write paper - Finish core function:  + Import staffs + Export report + Delete staffs + Edit report | Review, write test case in report 5 |
| Mon Week-12 08/04/2018 | Review and test function Fix bug Edit function: check attendance with images | Write report 6, finish paper |
| Mon Week-13 15/04/2018 | Review paper and document, fix bug | Prepare for presentation slide and submit all project |