Dear professor Mr. Rajesh.

My name’s An, my full name’s An Vo Hoang. I live in Ho Chi Minh city, Viet Nam and now I’m 25 years old.

I studied university in HCM University of Technology VNU-HCM from August 2011 and graduated in April 2016. I have done my thesis named “To develop an authenticating system using secured speech feature in smart mobile devices” with supporting from M.S Hai Truong Quang. My thesis’s objective was to provide the security service for smart mobile devices using speech feature. I gained some knowledge in feature extraction and feature matching.

After graduated university, I have studied master from October 2016 in HCM University of Technology VNU-HCM. I have done my thesis named “To assign label for moving objects in multiple cameras” with Assoc Prof PhD. Binh Nguyen Thanh. With this thesis, I want to investigate an approach for tracking multiple objects in multiple cameras. But my approach just track objects in an system with overlapped camera. I gained much knowledge in computer vision, data mining, machine learning.

With all of that, I strong believe that I could enjoy with your projects regarding to track objects in multiple cameras with non-overlapped FOV. When you presented about your project in HCM University of Technology (VNU-HCM), I really excited about that project and with my knowledge, I suggest solving that project by deviding it into 3 small tasks.

* Object detection: using DNN to detect moving objects and combine with background subtraction to enhance the accuracy of detection in the case that DNN could not detect the objects, we also use method to detect two objects are merged or split, it help us in solving the occlusion in object detection.
* Object tracking: we could separate to track in single camera and track in multiple camera.
  + Single camera tracking: using kalman filter or optimal flow or some time series methods and combine with feature extraction and feature matching to track objects.
  + Multiple cameras tracking: it’s mean we make sure assigning labels is consistent in all cameras. First thing we could use DNN and extract features like SIFT, ORG, color, shape, texture...to train deep features
    - In overlapped cameras: We could use stable matching with deep features of objects in the common FOV to make sure an object exist in several cameras has the same label.
    - In non-overlapped cameras: we could use the time, direction and velocity to predict the position of objects in another camera.

It’s just my opinion, so maybe it’s wrong and I really want to join with your project to research and prove that my thinking could be real.