

# Milestone 1 Report

- The problem is precisely defined
  - Input: Image or video capture
  - Output: A positioning frame that annotates around a human face, with values indicates whether they're wearing a mask and the probability of the prediction.
- The materials for OpenCV and PyTorch are unexpectedly dense and complex, team may need more time (~1 extra week) to comprehend all the knowledge prior to the implementation.
- The knowledge for AutoEncoder is built on the basics of model training(PyTorch), so it's getting put off as well.
- The dataset is found and collected from Kaggle and the training resources folder from the existing project.
- The implementation will take place immediately after team members gain satisfactory knowledge about the underlying tools and frameworks. The tentative (max) delay time is 2 week.
- Weekly plan completeness
  - Week 1 (80%)
    - Still need more information about PyTorch
  - Week 2 (40%)
    - Still need to figure out the learning algorithm
    - Still need more time to be comfortable to use related functions
    - The model building is delayed
  - Week 3 (40%)
    - The model building/training/testing is delayed
    - More neural networks concepts research needs to be conducted