We applied two well-known and successful algorithms, YOLO and FaceNet, in an attempt to combine the speed of YOLO with the accuracy of FaceNet on facial recognition.

In our project, we relied on Allan Zelener’s YoDL and David Sandberg’s FaceNet.

We utilized WIDER Face images and Labeled Faces in the Wild for each LFW image, we created 5 randomized cropings, with each dimension ⅓ that of the original. These were split into 50% 50% train/dev sets, since we were using a pretrained FaceNet model and thus needed less new data.

WIDER Face images are fed into a variant of YOLO with a single output class. These cropped images are sent to a FaceNet model pretrained on celebrity image data. FaceNet then identifies the person selected by YOLO.

References: [YOLO](https://github.com/aldridge/YOLOv3), [FaceNet](https://github.com/davidsandberg/facenet), [WIDER Face](http://wwwigsaw.cbsr.ias.edu/WIDERFace), [LFW](http://vis-www.cs.uic.edu/lfw)