Moving AI Model On-Device

Interesting Project Similar To What We Are Pursuing

* YOLO can be ported to mobile devices, but this project seems much more advanced than what we need. I don’t think we need real time detection. We should find a way to to inference on a mobile device, but we don’t need real-time inference I believe.

https://github.com/ultralytics/yolov5

<https://www.youtube.com/watch?v=tVGb614G_04>

Tiny YOLOv1

* Implementation of YOLOv1 on mobile devices, could be worth looking into.

<https://github.com/mdietrichstein/yolo-tiny-v1-mobile>

Tutorial From YOLOv5 to TensorFlow Lite

<https://hansheng0512.medium.com/yolov5-tflite-inferencing-in-mobile-devices-6131a9c0c153>

* TensorFlow Lite seems only implementable on Android Devices due to the strict iOS security requirements; will look more into this.

Ultralytics

* Uses YOLOv8 with mobile inference on Android devices; will look into customization.