

MASK-DETECT

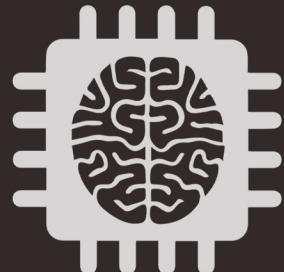
WORKFLOW:



COLLECTED IMAGES
AND RELEVANT XML
DATA FOR PEOPLE WITH/WITHOUT
MASKS



WROTE CUSTOM SCRIPT
TO TRANSLATE XML DATA TO
CSV FILE



BEGAN TRAINING CUSTOM
OBJECT DETECTION MODEL
USING GOOGLE CLOUD AUTOML



AFTER SEVERAL STRESSFUL
HOURS OF TESTING THE TESTING
WAS COMPLETE, AND WITH THAT THE
CODING BEGAN



SLOWLY WE WROTE OUR
EVALUATION FILE, THEN OUR MMS
FRAMEWORK, OUR VARIOUS HELPER FUNCTIONS,
AND FINALLY THE MAIN FILE TO
GLUE EVERYTHING TOGETHER



...AND NOW, AFTER NUMEROUS
SLEEP DEPRIVED HOURS WE
FIND OURSELVES HERE...
HELLO JUDGES!



BOSTONHACKS2020 - PATRICK KUZDZAL - CONOR WALSH - JUSTIN SAYRAH - FRANCIS HUGHES

FUTURE IMPLEMENTATIONS:

IN OUR COVID DOMINATED WORLD, IMPROVEMENT OF THIS PROJECT WOULD ENTAIL DEPLOYMENT ON LARGER SCALE USE CASES, SUCH AS APARTMENT COMPLEXES OR UNIVERSITY DINING HALLS. PROVIDED WITH CERTAIN HARDWARE, IMAGES COULD BE CAPTURED ONLY WHEN MOTION IS DETECTED AND NOTIFICATIONS COULD BE EXPANDED PAST SIMPLE TEXT MESSAGES. THE PAST FEW MONTHS HAVE SHOWN HOW IMPORTANT IT IS TO WEAR A MASK, AND OUR PROJECT COULD EVEN THEORETICALLY DENY THOSE NOT FOLLOWING GUIDELINES FROM ACCESSING CERTAIN SPACES. OVERALL, THE MESSAGE WE HOPE TO CONVEY IS THAT MASK-DETECT GOES FAR PAST BEING ONLY A "SMART-HOME" APPLICATION ... MASK-DETECT IS A PROJECT CONTRIBUTING TO A SMART-WORLD.