A computer vision based Drawing-Pad: It is an application that makes digital drawing less expensive, more convenient, and increases worker productivity and time-efficiency.

**Background:** we realized that there were many problems with all digital drawing solutions. Currently, if you want to draw digitally, whether that be professionally or for a hobby, you would have to buy a drawing tablet or an iPad. With PaperPad, we solved all of those problems with currently all other digital drawing solutions.

The first common problem we solved is that drawing tablets and iPads are very expensive, costing in the hundreds of dollars. This makes them inaccessible for many artists, students, and hobbyists.

So here we came with our Solution "Drawing pad". with this pad you have no need to carry an extra iPad or any other hardware it works perfectly on your existing laptop you just need a camera.

**How it works:** Drawing Pad uses computer vision to detect, locate, isolate, and locate your hand. It then uses a few complex algorithms to locate the tip of the pencil you are holding. Drawing Pad then uses that information to control mouse movement, clicking, and dragging, allowing you to draw digitally.

**What's next:** Right now we have a soultion that works but it still need some improvement in accuracy. We have to test it under different comditions like different lighting conditions, background, multiple hands etc. We are continuously working to imporove our existing product so that we can also achieve good accuracy in the areas that are blackbox for now