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Task Write Up - “Fps Overlay with OpenCV”

OpenCV is an open source library that consists of software tools to be used with computer vision. Having a predefined set of algorithms that is provided in the library allows solving computer vision problems, such as giving vision to the RoboSub, much easier. OpenCV works very well with Python, but also supports other languages like C++ and Java. Since it’s open source it is free to use for anyone, and there is plenty of documentation online on the OpenCV website and many tutorials walk through how to implement the features and algorithms of the library.

For this recruitment task OpenCV was used to display a video output, in this case the computer’s webcam, along with displaying the FPS (frames per second) of the video output. OpenCV provides modules to help with both capturing and displaying the image with text for the FPS, along with gathering data on each frame, specifically the exact time when each frame has been processed, in order to determine the FPS. After utilizing the OpenCV library, the final program was a relatively short and clean piece of code, and worked without problems.

Sources

https://docs.opencv.org/4.x/d0/de3/tutorial_py_intro.html

https://www.mygreatlearning.com/blog/opencv-tutorial-in-python/

https://www.geeksforgeeks.org/python-displaying-real-time-fps-at-which-webcam-video-file-is-processed-using-opencv/