Sprint 4 documentation (OPENCV in Python)

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Objective of Research

The objective of this research is to learn the functions of opencv and some of the documentation of this package. Researching opencv would help with the image processing of driverless car so it knows where to go.

Findings of Research

Opencv is a open source library used for computer vision, machine learning, and image processing. Opencv can be used to show pictures and videos but you can also manipulate images like changing the color spaces and adding blur to the pictures. The most interesting feature of opencv is the facial recognition feature which allows the program to detect the faces of the picture or video. For this feature to be use you have the opencv cascade classifier and the xml file to use it. The facial recognition is not perfect because it will mistaken the face for someone else that is not in the picture, but this feature is accurate most of the time and is the most interesting feature of opencv.

Conclusion

Opencv will be the best way to do image processing for this project and despite the facial recognition not being accurate sometimes, I feel this is the best open source library to do object detection.