Driving behavior recognition system based on OpenPose

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This research focuses on the ten major actions that driving in a car, using the human joint point detection system OpenPose and different angle lenses to identify the position of human joint points. Deep learning convolutional neural network recognition to train the recognition system. The system generates images and trains them to give the system memory to recognize the actions at the time of driving and achieve a good recognition accuracy rate.

> OpenPose shooting live images

Output png file and json file

Use deep learning to recognize pictures

Calculate joint feature vectors

Output comparison result

Phone

Wave

inside



Turn right

Turn left

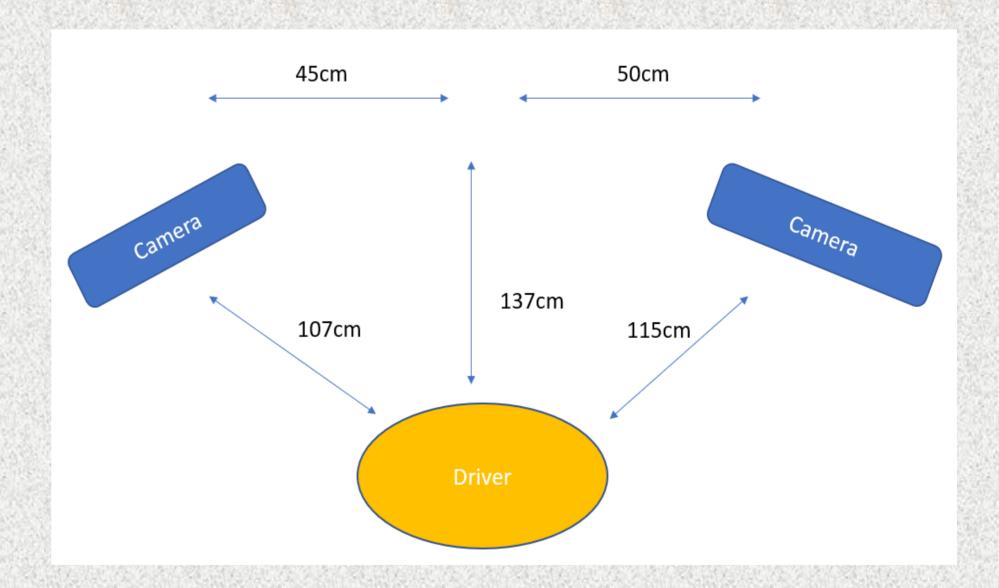
Check mirror

Adjust mirror

Wave outside

Texting Shift Horn

Driving behavior examples



Lens and shooting position





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