

UNIVERSITY OF SOUTH FLORIDA

Major Research Area Paper Presentation

Detecting Distracted Driving from Images by Processing Relative Locations of Objects of Interest Inside Vehicles

by

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For the Ph.D. degree in Computer Science and Engineering

Distracted driving on roads is a problem that is common across the world now. With the increasing use of smarter and connected devices, coupled with their miniature form factors, humans are now increasingly using these devices under mobility. When operating a vehicle, using smart devices can pose serious threats to road safety. Another contributing factor to distracted driving today stems from the urge to eat, drink and fall asleep while driving. In this paper, we use a popular and publicly available image dataset captured from embedded cameras inside cars that indicate instances of distracted driving or not. Different from existing works that look at the entire image to classify distracted driving, we first localize objects within the image that impact distracted driving like smartphone, bottles, steering wheel, and hands. Then, we process the relative locations of these objects within the image to detect instances of distracted driving. We believe, our research provides more contextual relevance towards detecting instances of distracted driving and could possibly yield newer approaches to educate drivers on safe driving. The presentation will also provide details on potential future work in this space.

Tuesday, February 9th, 2021

1:00 PM

Online, [Microsoft Team](#)

Please email arupkantidey@usf.edu for more information

THE PUBLIC IS INVITED

Examining Committee

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