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Lecture Notes in Electrical Engineering • Volume 770, Pages 339 - 355 • 2022 • 12th National Technical Seminar on Unmanned System Technology, NUSYS 2020 • Virtual, Online • 24 November 2020 through 25 November 2020 • Code 266059

Document type
Conference Paper

Source type
Book Series

ISSN
18761100

ISBN
978-981162405-6

DOI
10.1007/978-981-16-2406-3_27

Publisher
Springer Science and Business Media Deutschland GmbH

Original language
English

Volume Editors
Isa K., Md. Zain Z., Mohd-Mokhtar R., Mat Noh M., Ismail Z.H., Yusof A.A., Mohamad Ayob A.F., Azhar Ali S.S., Abdul Kadir H.

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Computer Vision Based Driver Assistance Drowsiness Detection

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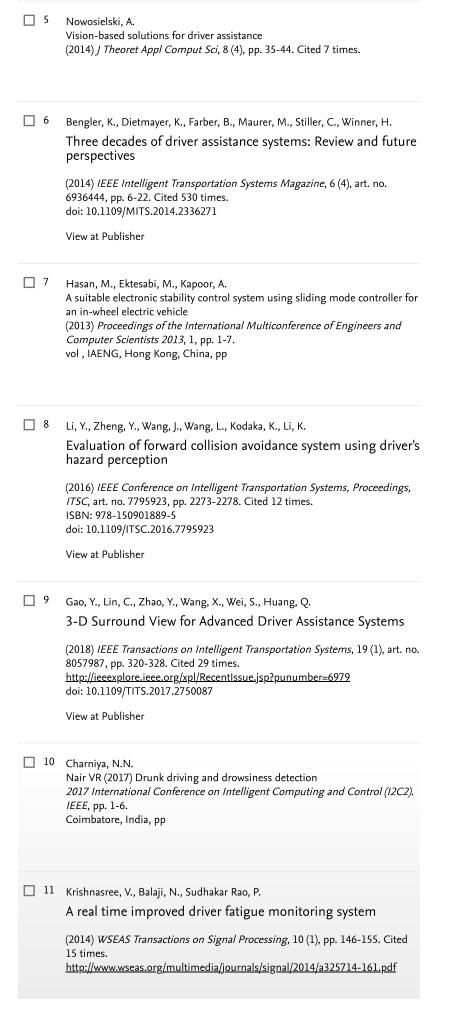Find more related documents in Scopus based on:

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Abstract

Nowadays, drowsiness is a serious cause of traffic accidents, a problem of major concern to society. Driver fatigue or sleepiness decreases the driver's reaction time, reduces attention, and affects the quality of decision making which impairs the driving experience. Therefore, in this paper, a drowsiness detection system is designed based on computer vision, using a cascade of classifiers based on Haar-like features. The system is able to detect the face and eyes of the driver and determine the eyes closure or opening, which concludes the drowsiness of the driver. The paper presents the five primary steps involves which are: video acquirement, frame separation, face detection, eyes detection and drowsiness detection. © 2022, The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd.

Author keywords

Driver assistance system; Driver behaviour; Eye tracking; Eyes detection; Face detection

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