Scopus Preview

Author search Sources

Create account Sign in

Document details

Export Download More...

2019 7th International Conference on Mechatronics Engineering, ICOM 2019
October 2019, Article number 8952041
7th International Conference on Mechatronics Engineering, ICOM 2019; Putrajaya; Malaysia; 30 October 2019 through 31 October 2019; Category numberCFP1951N-ART; Code 156771

Around View Monitoring System with Motion Estimation in ADAS Application (Conference Paper)

Bin Rasdi, M.H.F., Hashim, N.N.W.B.N., Hanizam, S.

View additional authors

Save all to author list

International Islamic University Malaysia (IIUM), Department of Mechatronics Kulliyyah of Engineering, Gombak, Malaysia

View additional affiliations

Abstract

Around View Monitoring (AVM) system uses multiple cameras as the sensor that is mounted on several positions on the vehicle to produce a display of top view image from the surrounding environment of the vehicle that is not readily visible to the driver because of the limited field of view of the driver. The risk of parking accident could be reduced by developing the system that can monitor the surrounding area, detecting parking slot lane and obstacle. A few seconds of early warning would significantly decrease the chances of accidents. This system can assist in the parking area and navigating through a narrow space area. Current AVM available usually needed another sensor to ensure a good performance output. But this is cost consuming besides increasing the computational time and resource. Here, proposed an AVM system that will integrate with the motion estimation algorithm to produce a good result. The AVM image sequence is from a camera input mounted on the vehicle. The algorithm to be tested is Gunnar Farneback. Movement in sequential frames is detected and converted to the real-world position change. This paper will compare the algorithms in various condition. The accuracy of the result was measured. © 2019 IEEE.

SciVal Topic Prominence

Topic: Motion estimation | Image coding | Diamond search

Prominence percentile: 74.333

Author keywords

ADAS AVM dynamic scene Gunnar Farneback motion estimation moving camera optical flow parking assist

Indexed keywords

Engineering controlled terms: Accidents Cameras Monitoring Optical flows Vehicles

Engineering uncontrolled terms: ADAS Computational time Dynamic scenes Gunnar Farneback Monitoring system Motion estimation algorithm Moving cameras Surrounding environment

Cited by 0 documents

Inform me when this document is cited in Scopus:

Set citation alert Set citation feed

Related documents

Find more related documents in Scopus based on:

Authors Keywords

Engineering main heading: Motion estimation

ISBN: 978-172812971-6
Source Type: Conference Proceeding
Original language: English
DOI: 10.1109/ICOM47790.2019.8952041
Document Type: Conference Paper
Sponsors: Inspilogix,ProStram Technologies
Publisher: Institute of Electrical and Electronics Engineers Inc.

© Copyright 2020 Elsevier B.V., All rights reserved.

About Scopus

What is Scopus
Content coverage
Scopus blog
Scopus API
Privacy matters

Language

日本語に切り替える
切换到简体中文
切換到繁體中文
Русский язык

Customer Service

Help
Contact us

ELSEVIER

Terms and conditions ↗ Privacy policy ↗

Copyright © Elsevier B.V ↗. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

We use cookies to help provide and enhance our service and tailor content. By continuing, you agree to the use of cookies.

RELX