qcjs.cbpt.cnki.net

AUTOMOBILE TECHNOLOGY

汽车技术

中国科学引文数据库来源期刊 中文核心期刊 中国科技核心期刊 RCCSE中国核心学术期刊(A) 俄罗斯《文摘杂志》收录期刊

ISSN 1000-3703 国内统一刊号: CN22-1113/U 邮发代号: 12-2

08 2018



汽车技术(月刊)

Qiche Jishu

2018年第8期(总第515期)

编辑委员会

名誉主任 郭孔辉*

主 任 李 骏* 付于武

委 员 (以姓氏笔画为序)

孙 逢 春* 北京理工大学

任 晓 常 中国汽车工程研究院

李 建 刚 东风汽车公司

余 卓 平 同济大学

林 逸 国汽汽车轻量化技术研究院

林 忠 钦* 上海交通大学

欧阳明高 清华大学

钟 志 华* 同济大学

徐 世 利 中国第一汽车集团有限公司

高卫民 上海蓥石汽车

管 欣 吉林大学

△中国科学院院士

* 中国工程院院士

1970年创刊

国内外公开发行

主 管: 国有资产监督管理委员会主 か: 长春汽车研究所出 版: 《汽车技术》编辑部主 编: 郝旭辉

广 告 策 划:夏方 李漫 张培刚

电 话: 17743014836

17743014859 17743014182

地 址:长春市东风大街8899号

邮 政 编 码:130011

电子信箱: bjb_qy@faw.com.cn

网址: http://qcjs.cbpt.cnki.net 国内统一刊号: CN22-1113/U

广告经营许可证: 2201005050129

印 刷:长春一汽四环汽研

印刷有限公司

国内发行: 吉林省报刊发行局

国 外 发 行:中国国际图书贸易总公司 (北京399信箱)

发 代 号: 国内12-2 国外M521

国内订阅:全国各地邮局

定 价:12元/册

本期出版日期:8月24日

《汽车技术》编辑部是一汽院士工作站秘书处

版权所有 未经许可 不得转载

目 次

・同济大学智能汽车决策技术专题・	
无人驾驶车辆行为决策系统研究	
	(1)
城市工况下基于改进RRT的无人车运动规划算法	
	(10)
基于库位跟踪的自动泊车决策规划系统	
	(18)
自主泊车路径规划一致性方法	
	(27)
基于EPS的车道保持辅助系统设计	
	(33)
·第五届国际智能网联汽车技术年会(CICV 2018)优秀论文选登·	
基于激光雷达感知的场景重构方法研究	
	(39)
毫米波雷达识别问题分析及解决措施	
杨航 高源	(43)
基于CNN和HSV模型的交通标志识别研究(英文)	
	(47)
AEB系统性能与碰撞时间关联性研究	
	(51)
一种基于AES-CCM算法的安全车载CAN网络协议	
	(54)
IBE技术在V2X通信中的应用	
	(60)

Editorial Committee

Honorary Chairman:

Guo Konghui*

Chairman:

Li Jun* Fu Yuwu

Members:

Sun Fengchun*

Ren Xiaochang

Li Jiangang

Yu Zhuoping

Lin Yi

Lin Zhongqin*

Ouyang Minggao^a

Zhong Zhihua*

Xu Shili

Gao Weimin

Guan Xin

 $\triangle \operatorname{Academician}$ of Chinese Academy

of Science

*Academician of Chinese Academy

of Engineering

Founded in 1970

Distributed in China and abroad

Department Responsible for:

State-owned Assets Supervision and Administration Commission

Sponsors:

Changchun Automotive Research Institute

Publisher: Automobile Technology

Editorial Board

Editor in Chief: Hao Xuhui

Address:

No. 8899 Dongfeng Street,

Changchun

Post Code: 130011

E-mail: bjb_qy@faw.com.cn Website: http://qcjs.cbpt.cnki.net

Tel: 86–431–82028067 **Ad:** Xia Fang, Li Man, Zhang Peigang

Tel: 17743014836 17743014859

17743014182

Overseas Distributor:

China International Book Trading Co. (P.O. Box 399, Beijing)

Code: M521

Editorial office is the office of China Academician Work Station

at China FAW

All rights reserved

CONTENTS

·Special Issue on Decision Making for Unmanned Vehicle of Tong ji Univer-sity
Research on Behavior Decision-Making System for Unmanned Vehicle
Xiong Lu, Kang Yuchen, Zhang Peizhi, Zhu Chenyu, Yu Zhuoping ($1\)$
An Improved RRT-Based Motion Planning Algorithm for Autonomous Vehicle in Urban
Environment · · · · Yu Zhuoping, Wei Ye, Xiong Lu, Li Yishan (10)
Decision-Making and Planning System of Autonomous Parking Based on Closed-Loop
Update of Parking Spot
Xiong Lu, Yan Senwei, Yu Zhuoping, Zhang Peizhi (18)
A Consistency Method for Autonomous Parking Path Planning
Yu Zhuoping, Xia Lang, Xiong Lu (27)
Design of Lane Keeping Assistance System Based on EPS
Guo Hongqiang, Chen Hui, Chen Jiachen (33)
${f \cdot}$ Selected thesis from The ${f 5}^{\rm th}$ International Congress of Intelligent and Comected
Vehicles Technology (CICV 2018)
Research on Ground Truth Generation Method Based on LiDAR Perception
Research on Ground Truth Generation Method Based on LiDAR Perception
Research on Ground Truth Generation Method Based on LiDAR Perception Xing Yu, Liu Yabin, Han Kang, Liu Yu, Ju Xueming (39)
Research on Ground Truth Generation Method Based on LiDAR Perception Xing Yu, Liu Yabin, Han Kang, Liu Yu, Ju Xueming (39) Analysis and Solutions of Recognition by Millimeter–Wave Radar
Research on Ground Truth Generation Method Based on LiDAR Perception Xing Yu, Liu Yabin, Han Kang, Liu Yu, Ju Xueming (39) Analysis and Solutions of Recognition by Millimeter–Wave Radar Yang Hang, Gao Yuan (43)
Research on Ground Truth Generation Method Based on LiDAR Perception Xing Yu, Liu Yabin, Han Kang, Liu Yu, Ju Xueming (39) Analysis and Solutions of Recognition by Millimeter–Wave Radar Yang Hang, Gao Yuan (43) A Study on Traffic Sign Recognition Based on CNN and HSV Model
Research on Ground Truth Generation Method Based on LiDAR Perception Xing Yu, Liu Yabin, Han Kang, Liu Yu, Ju Xueming (39) Analysis and Solutions of Recognition by Millimeter–Wave Radar Yang Hang, Gao Yuan (43) A Study on Traffic Sign Recognition Based on CNN and HSV Model Zhan Ziqi, Liu Bing, Huo Bin (47)
Research on Ground Truth Generation Method Based on LiDAR Perception Xing Yu, Liu Yabin, Han Kang, Liu Yu, Ju Xueming (39) Analysis and Solutions of Recognition by Millimeter–Wave Radar Yang Hang, Gao Yuan (43) A Study on Traffic Sign Recognition Based on CNN and HSV Model Zhan Ziqi, Liu Bing, Huo Bin (47) Research on Relevance of AEB System Performance and TTC
Research on Ground Truth Generation Method Based on LiDAR Perception Xing Yu, Liu Yabin, Han Kang, Liu Yu, Ju Xueming (39) Analysis and Solutions of Recognition by Millimeter–Wave Radar Yang Hang, Gao Yuan (43) A Study on Traffic Sign Recognition Based on CNN and HSV Model Zhan Ziqi, Liu Bing, Huo Bin (47) Research on Relevance of AEB System Performance and TTC Liu Jianping, Zheng Wangxiao, Zheng Yang (51)
Research on Ground Truth Generation Method Based on LiDAR Perception Xing Yu, Liu Yabin, Han Kang, Liu Yu, Ju Xueming (39) Analysis and Solutions of Recognition by Millimeter–Wave Radar Yang Hang, Gao Yuan (43) A Study on Traffic Sign Recognition Based on CNN and HSV Model Zhan Ziqi, Liu Bing, Huo Bin (47) Research on Relevance of AEB System Performance and TTC Liu Jianping, Zheng Wangxiao, Zheng Yang (51) A Secure In–Vehicle CAN Network Protocol Based on AES–CCM Algorithm