Application of Simulated Annealing Algorithm to Storage Problems under Demands Uncertainty
Yonghao Zhang and Xuyu Fei

A Model Study of Lane Changing Based on Driving Behavior
Jinqiang Xu, Yi Ding, and Zhushi Chen

Quantifying the Severity of Traffic Conflict by Assuming Moving Elements As Points in Intersection
Guangquan Lu, Miaomiao Liu, Yunpeng Wang, and Daxin Tian

The Development Tendency Analysis and Forecasting Method of Urban Freight Volume Based on the Industrial Reconstructing
You-Wang Sun and Qiang Xiong

Analysis of SP Panel Data for Route Choices Considering Latent Variables
Weijie Wang and Wei Wang

Traffic Operation, Management, and Control

Algebraic Optimization Method for Arterial Road Signal Coordination Control
Da-yi Qu, Rong-gui Huang, Xiu-feng Chen, Tao Li, and Xi-rui Yang

PCA-CA Method for Road Traffic Safety Macroscopic Evaluation and Safety Level Classification
Yu Lin, Yu Ye, and Jiangfeng Niu

Effects of Bicycle Traffic on Vehicular Delays at Signalized Intersections with Pre-Right-Turn Lanes
Chenjing Zhou, Jian Rong, and Changqiao Shao

Efficiency Model of Intersections Based on Traffic Conflict
Jiajun Shen, Wei Wang, and Xuewu Chen

Research of Short-Term Traffic Flow Forecast Method Based on the Kalman Filter
Feng Chen, Yuanhua Jia, Wenjuan An, Na Zhang, and Zhonghai Niu

Ant Colony Algorithm for Regional Bus Scheduling Problem with Bus Task Reliability
Wen-zhou Jin and Ming Wei

Analysis of Jinan BRT Speed Characteristics Based on Vehicle Traveling Data Recorder

Ruhua Zhang, Tiantian Wang, Hao Wan, Li Lei, and Baiying She

Lane Management Techniques for Multilane Freeways
Man-juan Yang, Ke-man Wu, and Lian-de Zhong

Fuzzy Comprehensive Evaluation for Freeway Section Level of Service under the Condition of Limited Speed
Ming-shun Li, Min Ren, and Dan-dan Liu

A Regression Car-Following Model Based on Time Delay Differential Equation on Expressway
Zhi-yong Zhang and Yi Huang

Conversion Mechanism of Reversible Lane System under Urban Tidal Flow Condition
Ying-Shun Liu, Xue-Hui Wang, and Xian-Deng Liang

Estimation of Traffic Flows at Intersections Based on Traffic Assignment and Neural Network Model
Qin Fang, Shanhua Wu, and Zhognzhen Yang

Personal Travel Survey Methods Analysis and Selection in China
Han-kang Mo and Xiao-guang Yang

Development of Management System of Traffic Monitoring Resource Based on GIS
Hailin Chen, Shuyan Chen, Zhenyu Liu, and Henhong Liang

Simulation Analysis on the Impact of Ramp Setting on the Level of Service of Terminal Collector Expressways
Xingjian Xue, Xinquan Ou, Rui Song, and Kefei Yan

Capacity of Through Short Lane Group on Urban Road Intersection
Ai-zeng Li, Wei Wang, Xin-sheng Song, and Wen-quan Li

Transportation Characteristics and Analysis of Management Measures of Expressways during Holidays
Lin Li and Yan Wang

Pedestrian Behavior and Traffic Violations at Signalized Intersections
Jing Chen, Jian-Jun Shi, Xiao-Li Li, and Qing Zhao

Study of Signal Control Based on Conflicts between Right-Turn Vehicles and Straight-Going Bicycles
Tao Pan and Lin Cheng

Comprehensive Evaluation of Signalized Intersections' Level-of-Service Based on Information Entropy Theory
Xiaoyan Zheng, Rui Dou, Heng Ding, and Weihua Zhang

Study on Multi-State Traffic Flow Rapid Simulation Technology
Function Evaluation on Transfer Hubs by Principal Component Analysis
Shuwei Wang, Lishan Sun, and Jian Rong

Study on the Influence Coefficient of Road Capacity Caused by Vehicles Pulling in and out of Parking Spaces for Roadside Parking
Yaqin He and Jie Li

Exploring Contributing Factors for Driver’s Selection of Unconventional Outside Left-Turn Lanes
Jingjing Wan, Pan Liu, Zhibin Li, Jia Huang, and Chengcheng Xu

Development of Correlation Degree Model between Adjacent Signal Intersections for Subarea Partition
Yiming Bie, Dianhai Wang, Qiang Wei, and Dongfang Ma

Method of Utility Analysis of Traveler Information in Regular Travel
Hai-peng Shao and Su-feng Wu

Optimization Method for Train Plan of Urban Rail Transit
Lianbo Deng, Qiang Zeng, Wei Gao, and Zhao Zhou

An Optimal Signal Timing Method for Intersections Based on Minimum Generalized Cost
Weihua Zhang, Xue Peng, and Bo Yang

Study of Portable Inspection System Based on Image for Law Enforcement of Timber Transportation
Lin Jing, Yuhong Lin, and Jiangang Guo

A Study for the Impacts of Curb Parking to the Traffic Flow at the CBDs of Medium-Sized Cities
JinXin Cao, ShiYuan Zhang, MoLin Xing, and YinPeng Li

Analysis and Application of Spatial Distribution of Taxi Service in City Subareas Based on Taxi GPS Data
Zhen Zhang and Xiang He

Phase and Sequences Selection of Arterial Coordination Control
Tianxiao Jiang, Quan Yu, Xiaohui Deng, and Jian Rong

A Practical Plate Character Recognition Algorithm Study Based on Thinning Characters
Wenjin Yu, Xiying Li, and Ling Luo

Traffic Congestion Research of Road and Railway Intersections
Xiangyang Li and Lin Cheng

Fusion and Recognition of Traffic State Information Model on High-Grade Highway Segment
Space-Time Characteristics of Traffic Flow under Land Redevelopment
Feifei Zhang, Yanli Wang, Linbo Li, and Bing Wu

Study on the Model of Urban Road Congestion Charging
Xiaoxia Li, Dijie Li, and Lihua Xue

Bus Rapid Transit Scheduling Optimal Model Based on Genetic Algorithm
Shi Liang, Zhaocheng He, and Zhiren Sha

Static Origin-Destination Matrices Estimation for Highway
Zhaocheng He and Xiubin Dai

Best Distance between Two Roads of One-Way Traffic
Hongjing Fan and Qinghong Huang

Intelligent Transportation Systems

A Planning Model for Determining Optimal Locations of Parking Guidance Sign Boards Based on Utility Maximization
Yanjie Ji, Wei Deng, and Wei Wang

Improved Bicycle Cellular Automata Model Considering the Socio-Psychological Force
Jianhua Deng

Ship-Track Control Based Traffic Safety Assessment of Ships in the Constrained Waters
Wei Li, Zheng-jiang Liu, Tie-shan Li, and Qiang Li

Urban Road Traffic Incident Auto-Detecting Based on Decision Fusion
Changjiang Zheng, Qiang Zhou, Shuyan Chen, and Zhangxiao Yu

Road Network Coverage Rate of Real-Time Traffic Information Service Based on FCD
Jinping Guan and Jingwen Liu

A Car-Following Model Based on the Distribution Characteristic of Headway
Pengfei Tao, Dianhai Wang, Sheng Jin, and Dongfang Ma

Study of Queue Length and Delay Calculation Based on Taxi GPS Data
Hangfei Lin and Daren Liu

Abnormal Pedestrian Crossing Detection Based on Video Processing
Hongyu Hu, Sheng Jiang, Zhihui Li, and Zhaowei Qu

Nighttime Vehicle Detection Based on Illumination Visibility Recognition
Zhaowei Qu, Jinhui Hu, Hongyu Hu, Sheng Jiang, and Dianhai Wang
Research on the Model for the Lateral Interferences to Speed from the Adjacent Lanes
Jinxin Cao, Chongzi Xiao, and Zhen Lv

Efficiency Analysis on Integrated Traffic Signal Control about Urban Expressway
Runmin Xu, Shengchao Yin, Danya Yao, Yi Zhang, Yuelong Su, Haizheng Zhang, and Gang Chang

Determining the Small Sample Size of Probe Vehicles Based on Micro-Simulation
Wei Zhou, Shengchuan Zhao, and Kai Liu

The Advanced Nonparametric Model for Short-Term Traffic Volume Forecasting
Xiaofa Shi and Qianli Ren

System Architecture of an Intelligent Parking Service Environment Based on FIPA
Jun Wang and Longfei Wang

On-Line Map-Matching Algorithm for Long Time Interval Floating Car Data
Xi-wei She, Zhao-cheng He, Wen-chen Yang, Wei-liang Zeng, and Zhi-ren Sha

Simulation on Cooperation of Urban Expressway Traffic Guidance and Control Using Paramics
Juan Xiong, Xiaoyu Hou, Jing Liu, and Jizhen Guan

Strategy for Road Travel Information Service System Development in China
Jingyan Gu, Wingxin Su, and Wenji Fan

Historical Travel Time Based Bus-Arrival-Time Prediction Model
Guojun Chen, Xiaoguang Yang, Dong Zhang, and Jing Teng

Study on Dynamic Origin-Destination Estimation of Large-Scale Road Networks
Jun-wei Li, Hua-pu Lu, Xue-fei Geng, and Hai-wei Wang

A Parking Space Finding Method Based on VANETs
Daxin Tian, Yunpeng Wang, Guangquan Lu, Guizhen Yu, Xuting Duan, and He Liu

Analysis of Car Drivers’ Preference for Traffic Information
Rui Sun, Jing Liu, and Jizhen Guan

An Extraction Method of Road Structure for Surveillance Video
Dong-hua Luo, Jian-hua Zhao, Xi-ying Li, and Zhen-bo Wang

The Ramp Merging Control Algorithm and Simulation Based on VII
Yunpeng Wang, Wenjuan E, Daxin Tian, Guanquan Lu, and Guizhen Yu

Highway Curve Collision Avoidance Warning System Based on VII
Yunpeng Wang, Wenjaun E, Daxin Tian, Guanquan Lu, and Guizhen Yu
Traffic Reliability Model of Linked Intersections Based on Demand/Capacity
Runlin Cai and Xiaoguang Yang

A Traffic Congestion Detection Method for Surveillance Videos Based on Macro Optical Flow Velocity
Xiying Li, Yongye She, Guigen Yang, Youting Zhao, and Donghua Luo

Techniques of CORS for the Development of Intelligent Transportation
Lei Wang and Wusheng Hu

Analysis on the Improvement of the Application Level of the Public Security Traffic Command System
Hongtong Qiu, Chunjun Yu, and Jianxin Miao

Application and Prospect of Internet of Things in Intelligent Traffic Management
Chungjun Yu, Hongtong Qiu, Leiyuan Zhang, and Liqiang Lu

Evaluating the Control Strategies of Variable Speed Limits in PARAMICS: Determining the Optimal Intervention Startup Threshold
Zhibin Li, Pan Liu, Wei Wang, Jingjing Wan, and Chengcheng Xu

Safety-Oriented Driving Environment Perception and Reconstruction System
Chunyu Zhang, Wen Wang, Qianghua Wang, and Yong Su

Incorporating Saliency Map into Prediction of Drivers' Eye Fixations on Traffic Signs
Zhi Xu, Hongzhi Guan, and Hai Yan

Design and Implementation of Highway Vehicle Weight-in-Motion System of Low-Power Based on Quartz Piezoelectric Sensor
Pingping Wang, Jingling Lu, Yuwen Huang, and Changxin Wang

Lane-Level Positioning Method Based on 3D Map for Vehicle Navigation System with Single GPS
Lin Zhang, Zhaosheng Yang, Hongmei Jia, and Bin Wang

A New Car-Following Dynamic Model and Stability Analysis
Bao-gui Cao and Zhao-sheng Yang

A Simulation Study of Data Collection Based on Vehicle Infrastructure Cooperation
Jun Ding and Zuo Zhang

Optimized Combination Model and Algorithm of Parking Guidance Information Configuration
Zhenyu Mei, Jun Chen, and Wei Wang

A Summary of Short-Term Traffic Flow Forecasting Methods
Gang Chang, Yi Zhang, Danya Yao, and Yun Yue
GIS-Based Coding Approach and Algorithm for Urban Road Elements 1708
Lin Zhu, Lei Yu, Xu-me Chen, and Bo He

Exploring the Influence of Real-Time Traveler Information on the Macroscopic Fundamental Diagrams 1720
Ting-ting Zhao, Zhi-heng Li, Bei-peng Mu, and Yi Zhang

Data Repair Method for Real Time Urban Link Speed Estimation 1733
Weiliang Zeng, Zhaocheng He, and Xiwei She

Traffic Safety and Emergency Management 1745

Recognition of the Driver’s Unhealthy Facial Expression Based on Independent Component Analysis and Support Vector Machine 1745
Chihang Zhao, Jie He, Xin Zhong, Congzhi Jiang, and Zhao Shen

Regulating the Road Transport of Dangerous Goods: A Framework for a Dynamic Monitoring System 1751
Tongliang Zhang, Rong Wei, Lei Gao, Jingyan Gu, Hui Tang, RuSheng Zhou, and WeiWei Li