6th International Conference on Transportation and Traffic Engineering (ICTTE 2017)

MATEC Web of Conferences Volume 124 (2017)

Hong Kong, China 1 - 3 July 2017

Editors:

M. Figueira G. Lodewijks R. Montemanni J. Rzesny

ISBN: 978-1-5108-4883-2

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

This work is licensed under a Creative Commons Attribution license: http://creativecommons.org/licenses/by/2.0/

You are free to:

Share – copy and redistribute the material in any medium or format.

Adapt – remix, transform, and build upon the material for any purpose, even commercial.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. The copyright is retained by the corresponding authors.

Printed by Curran Associates, Inc. (2017)

For additional information, please contact EDP Sciences – Web of Conferences at the address below.

EDP Sciences – Web of Conferences 17, Avenue du Hoggar Parc d'Activité de Courtabœuf BP 112 F-91944 Les Ulis Cedex A France

Phone: +33 (0) 1 69 18 75 75 Fax: +33 (0) 1 69 28 84 91

contact-edps@webofconferences.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA

Phone: 845-758-0400 Fax: 845-758-2633

Email: curran@proceedings.com Web: www.proceedings.com

TABLE OF CONTENTS

ESTABLISHED METHOD OF HIGH-SPEED RAILWAY SURVEY CONTROL NETWORK	1
MULTI-PATH SIGNAL SYNCHRONIZATION MODEL WITH PHASE RATIO AND DISPERSION CONSTRAINTS	6
Huang Tzu-Jung, Cho Hsun-Jung, Huang Chien-Chia Liäm	
PLATOON DISPERSION ANALYSIS BASED ON DIFFUSION THEORY	13
Badhrudeen Mohamed, Thomas Helen, Vanajakshi Lelitha Devi, Sharma Anuj	13
ESTABLISHMENT AND EMPIRICAL ANALYSIS OF EVALUATION INDEX SYSTEM FOR	
BASIC PUBLIC SERVICE LEVEL OF TRANSPORTATION	18
Jiang Jingling, Gong Luyang, Li Yanhong	10
A COGNITIVE AND METACOGNITIVE APPROACH FOR EXPLORING LINK BETWEEN	
URBAN TRANSPORT ENVIRONMENT AND DRIVER BEHAVIOUR: CASE OF ROUNDABOUT	
CROSSED BY TRAMWAY LINE	25
Moutchou Fatiha, Cherkaoui Abdelghani	23
CONSTRUCTION OF VISUAL INSPECTION DATABASE FOR CATENARY ON HIGH-SPEED	
RAILWAYS	33
Wang Yan-guo, Xie Dapeng, Wang Haiying, Li Xiangdong, Shi Jing, Li Hailang, Xiao Kexin, Li Jincai	
ESTIMATING BLUETOOTH MAC SCANNER BASED PEDESTRIAN FLOW	
CHARACTERISTIC BY TAKING THE THROUGH PEDESTRIAN FLOW AS A CASE STUDY	38
Lan Qing, Gao Bowen, Chen Zhigui, Zhu Sicong	
IRREGULAR GIS CURVE FITTING BASED HIGH SPEED RAILWAY EARTHQUAKE	
INFLUENCE RANGE CALCULATION MODEL	15
Hu Zhaobing, Liu Zhiming, Yang Lianbao	
EXPERIMENTAL RESEARCH ON SHEAR DUCTILITY OF REGIONAL CONFINED	
CONCRETE BEAM	51
Wu Qinggui, Cao Xinming, Guo Guyue	
CONGESTION TOLLING FOR MIXED URBAN FREIGHT AND PASSENGER TRAFFIC	56
Xie Chaoda, Wang Xifu	50
RESEARCH ON SHORT-TERM PREDICTION MODEL OF FREEWAY OPERATION	
SITUATION	66
Zhang Xiaodan	
APPLICATION OF THE ANALYTIC HIERARCHY PROCESS TO IDENTIFY THE MOST	
SUITABLE LESSOR OF FREIGHT CAR FINANCE LEASING	71
Lei Lei, Zhou Yin, Xiao Yongqing	, 1
DESIGN OF A MULTI-LAYER LANE-LEVEL MAP FOR VEHICLE ROUTE PLANNING	77
Liu Chaoran, Jiang Kun, Yang Diange, Xiao Zhongyang	
REVIEW ON DRIVERLESS TRAFFIC FROM MANAGEMENT PERSPECTIVE	82
Chen Tingting, Chen Fei, Chen Cheng	02
ISLAND IN AN ISLAND – THE SUGGESTIONS FOR TRANSPORTATION IMPROVEMENT	
PLAN FOR HAIDIAN ISLAND, HAIKOU, HAINAN	88
Sia Rosalind Juo Ling, Zhu Xiaodan	
STUDY ON COMPREHENSIVE DECISION OF URBAN RAIL TRANSIT NETWORK	
PLANNING	95
Sheng Liu	
ANALYTICAL STUDY OF THE LANE-BY-LANE VARIATION FOR LANE-UTILITY AND	
TRAFFIC SAFETY PERFORMANCE ASSESSMENT USING NGSIM DATA	99
Xu Zhandong	
SAFETY PERFORMANCE EVALUATIONS FOR THE VEHICLE BASED MOVABLE	
BARRIERS USING FULL SCALE CRASH TESTS	105
Jin Minsoo, Lee Sukki, Park Wonil, Park Insong	103
A NOVEL APPROACH FOR IDENTIFICATION AND RANKING OF ROAD TRAFFIC	
A NOVEL ATTROACH FOR IDENTIFICATION AND RANKING OF ROAD TRAFFIC ACCIDENT HOTSPOTS	110
Zahran El-Said M.M., Tan Soon Jiann, Yap Yok Hoe, Rahman Ena K.A., Husaini Nurulhikmah H.	110
IMPACTS OF LARGE VEHICLES ON TRAFFIC SAFETY IN FREEWAY INTERCHANGE	
MERGING AREAS AND IMPROVEMENT MEASURES	116
Guo Yifan, Xiang Oiaojun, Li Shen, Zhang Ting, Yao Rao	110
7	

SAFETY ASSESSMENT OF AUXILIARY LANES IN FREEWAY INTERCHANGE WEAVING	100
AREAS BASED ON TRAFFIC CONFLICT TECHNIQUE	123
Yao Rao, Xiang Qiaojun, Gu Xin, Guo Yifan, Zhang Ting	
RESEARCH ON THREE - DIMENSIONAL COOPERATIVE FORMATION OF SEA AND AIR FOR CRUISE AND RESCUE	120
Wei Fan	129
SPEED-CONSISTENCY BASED SAFETY EVALUATION FOR FREEWAY DIVERGING	
SEGMENTSSEGMENTS	136
Zhang Ting, Xiang Qiaojun, Li Shen, Yao Rao, Guo Yifan	130
ANALYSIS OF DRIVERS' ERRORS AT ROUNDABOUTS IN MOROCCO	141
Moutchou Fatiha, Cherkaoui Abdelghani	
FACTORS AFFECTING ACCIDENTS RISKS AMONG TRUCK DRIVERS IN EGYPT	148
Elshamly Ahmed Fathalla, El-Hakim Ragaa Abd, Afify Hafez Abbas	
DFT ANALYSIS OF SHIP PILOTAGE RISK BASED ON A.D. HALL MODELS	153
hongbin Wei	
A LOGIC ARCHITECTURE FOR 360 ADAS-ALERTS FOR HAZARDS DETECTION BASED IN	
DRIVER ACTIONS	159
Izquierdo-Reyes Javier, Curiel-Ramirez Luis A., Ramirez-Mendoza Ricardo A., Bustamante-Bello M. Rogelio	
THE APPLICATION OF UNCERTAINTY THEORY IN VEHICLE COLLISION ACCIDENT	
RECONSTRUCTION	165
Ji Su-yang, Xia Jing-jing	
MUSIC RECOMMENDATION SYSTEM FOR HUMAN ATTENTION MODULATION BY	
FACIAL RECOGNITION ON A DRIVING TASK: A PROOF OF CONCEPT	169
Avila-Vázquez Roberto, Navarro-Tuch Sergio, Bustamante-Bello Rogelio, Mendoza Ricardo A. Ramírez,	
Izquierdo-Reyes Javier	
OPTIMAL LOCATION OF DRY PORTS IN THE PAN-PEARL RIVER DELTA	174
Wu Qitao, Zhang Hongou, Wang Yang	
PORT LOGISTICS POLICIES EVALUATION BASED ON DIFFERENCE-IN-DIFFERENCE	100
MODEL	180
CHALLENGES AND STRATEGIES OF ABIDJAN PORT-HINTERLAND CONNECTIVITY	105
Gamassa Pascal Kany Prud'ome, Chen Yan	163
THE IMPACT OF INTERNATIONAL LOGISTICS TO INTERNATIONAL TRADE RESEARCH	
BASED ON AN EMPIRICAL ANALYSIS OF THE DATA IN 1995-2014 IN SHANDONG	
PROVINCEPROVINCE	192
Jiang Zhenyu, Wu Yaohua	1)2
A GAME ANALYSIS ON INFORMATION SHARING OF MILITARY PROCUREMENT AND	
LOGISTICS STANDARDIZATION	199
Ling Darong, Zhang Fei, Wang Ziyi, Li Yukun	
OPTIMIZING THE DISTRIBUTION SYSTEM OF FAST MOVING CONSUMER GOODS	
COMPANY USING SWEEPING METHODS WITH DISCRETE EVENT SIMULATION	
APPROACH	204
Rahmawan D. Arry, Aufa H. Bhagas, Qalbi A. Fairuz, Nur K. Satrio, Brahmantyo Bagas	
RESEARCH ON INLANDPORT FACILITIES ADAPTABILITY EVALUATION INDICATOR	
SYSTEM	211
Xie Yaofeng, Liu Chenglin, Gao Suyang, Chen Yan, Jiang Ning	
DYNAMIC ENERGY CONSUMPTION AND EMISSION MODELLING OF CONTAINER	
TERMINAL BASED ON MULTI AGENTS	218
Hou Jue	
ESTIMATES THE EMISSION OF PASSENGER CARS BASED ON THE FIRST DEVELOPED	
DRIVING CYCLE IN NAKHON RATCHASIMA MUNICIPALITY, THAILAND	224
Muangnak Noppatsorn, Chuersuwan Nares	
THE EFFECTIVE SPATIAL QUALITIES ON URBAN TOURISM IN IRAN FOCUSING ON	222
SOCIAL FACTORS	229
Razavi Kambiz, Barta Filipe Themudo, Amini Elham	
EXPERIMENTAL ANALYSIS OF HC EMISSION BEHAVIOR FROM A LEAN BURN LPG ENGINE DURING TRANSIENT OPERATING CONDITIONS	225
Zhongbo Zhang, Lifu Li, Jiajie Ou	233
RESEARCH ON LOADING SYSTEM OF THE RAIL VEHICLE BOGIE TEST BED	2⊿1
Lu Ning, Ren Li Na, Chen Zhong Wei	41

DRY FRICTION CLUTCH DISC OF AN AUTOMOBILE UNDER TRANSIENT THERMAL	
LOAD: A COMPARISON OF FRICTION LINING MATERIALS	245
Ali Anosh, Ali Liaqat, Shah Samiur Rahman, Khan Mushtaq, Imran Syed Husain, Butt Shahid Ikramullah	
EXPERIMENTAL INVESTIGATION OF PERFORMANCE AND EMISSIONS OF A	
STRATIFIED CHARGE CNG DIRECT INJECTION ENGINE WITH TURBOCHARGER	250
Amiruddin Hilmi, Mahmood Wan Mohd Faizal Wan, Abdullah Shahrir, Mansor Mohd Radzi, Abdollah Mohd	
Fadzli	
ON OPTIMIZING STEERING PERFORMANCE OF MULTI-AXLE VEHICLE BASED ON	
DRIVING FORCE CONTROL	255
Wu Zhicheng, Chen Cong	
DESIGN OF A SUSPENSION SYSTEM AND DETERMINING SUSPENSION PARAMETERS OF	
A MEDIUM DOWNFORCE SMALL FORMULA TYPE CAR	261
Biswal Sadjyot, Prasanth Aravind, Udayakumar R. Dr., Deva Shobhit, Gupta Aman	
DESIGN OF STEERING SYSTEM FOR A SMALL FORMULA TYPE VEHICLE USING TIRE	
DATA AND SLIP ANGLES	267
Biswal Sadjyot, Prasanth Aravind, Udayakumar R., Sankaram M.N., Patel Dhruvil	
IDENTIFYING UNIQUE CHARACTERISTICS OF DISASSEMBLY FOR VARIOUS PRODUCT	
RECOVERY METHODS WITH A FOCUS ON REMANUFACTURING	272
Priyono Anjar	
FREEZING ISSUE ON STABILITY MASTER PRODUCTION SCHEDULING FOR SUPPLIER	
NETWORK: DECISION MAKING VIEW	277
Aisyati Azizah, Samadhi T.M.A. Ari, Ma'ruf Anas, Cakravastia Andi	
Author Index	