2017 International Conference on Smart City and Systems **Engineering (ICSCSE 2017)**

Changsha, China 11-12 November 2017



IEEE Catalog Number:

CFP17K01-POD **ISBN:** 978-1-5386-1402-0

Copyright \odot 2017 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

 IEEE Catalog Number:
 CFP17K01-POD

 ISBN (Print-On-Demand):
 978-1-5386-1402-0

 ISBN (Online):
 978-1-5386-1401-3

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

E-mail: curran@proceedings.com Web: www.proceedings.com



2017 International Conference on Smart City and Systems Engineering

ICSCSE 2017

Table of Contents

Preface	xi
Organizing Committee	xii
Reviewers	xiii
Session 1: Smart City Infrastructure Engineering	
Assessment of Dynamic Effect on the Response of Rectangular Bridge Pier under Wave Loading	1
Qiang Liu, Jia Rui Zhang, Shunquan Qin, and Kai Wei	
Base on On-Site Inspection Study on the Plant Landscape Design of the Cemetery of Modern City: Taking Beijing Tianshou Cemetery	
and Babaoshan People's Cemetery as Examples	6
Design of Limited Power Omni-Directional Vehicle Based on Chassis Follow	10
Diethyl Aminoethyl Hexanoate Enhance One-Step Culture in Echinacea Purpurea L.	14
Xiao-Lu Chen, Dahanayake Nilanthi, Yue-Sheng Yang, Hong Wu, and Ye-Yuan Chen	
Experimental Study on Mutual Influence of Cooling Water Discharged from Two Adjacent Coastal Power Plants	18
Yan Li	
Machining Deformation Control and Compensation Using Whole Mirror Milling Method for Tank Thin-Walled Parts	23
Hongyuan Wei, Jian Mao, and Ning Wang	
Purification Effect of Plants on COD, DO from Domestic Sewage in Jilin City	29

Research on Virtual Simulation of Whole Process Teaching of Thermal Power	
Project	.32
Xueran Zhang, Tongjun Jiang, Zekun Zhang, and Chengyuan Liu	
Study On-Line Monitoring Method of 35KV Zinc Oxide Surge Arrester with Gap	20
Based on Lightning Impulse Characteristic	.36
The Influence of Anti-Stripping Agent on the Mesoscopic Strength of Basalt	
Modified Bitumen Mixture	.41
Qi Chunling and Wang Xianli	
The Key Technology of Virtual Simulation Practice Teaching of Power Plant	
Equipment	.45
Xueran Zhang, Dezhen Peng, Genkuan Lian, and Huili Jiang	
Thought for the CIM Construction Model of the Urban Landscaping	
Engineering	.49
Jie Li, Yingying Li, and Chen Chen	
Session 2: Information Management and System Engineerin	g
A Scheduling Model and Its Implementation Based on Intelligent Public	
Transportation System	.52
Liu Kaiyuan, Li Lifeng, and Tan Feigang	
An Empirical Study on the Impact of the Scarcity Factors on Individual	
Decision-Making Risk Behaviors in Emergency	.55
Qi Haijing and Liu Xiang	
Analysis and Data Mining of Students' Consumption Behavior Based on	
a Campus Card System	.58
Analysis on Seismic Behavior of Prefabricated Segmental Bridge Columns with Hybrid System	.61
Jiuqiang Chen, Yuye Zhang, and Wancheng Yuan	.0.
Construction of Intelligent City Evaluation System Based on Entropy Model	.67
Ye Zheng and Miaochao Chen	
Evaluation of the Main City Park Garden Sculpture in Northeast China	
by Applying SBE Methods	.72
Zhang Jie, Qi Jizhong, and Wang Yang	
Initial Analysis on the Construction of Smart Governance System for Special	
Yao Xiao, Qi Lan, and Ping Wang	.75
	00
Project Management Based on Computer Simulation Technology	.ŏ∠

Research on the Application of Information Technology in Human Resource Management	95
Xie Zheng	00
Study on Insurance Company Operating Performance Analysis Method	
with the DEA Model	89
The Application of IT in Engineering Management	93
The Evaluation of Chinese Classical Pavilions Based on SBE Method	96
The Silk Road Economic Belt-Urumqi Construction for Regional Financial Center Analysis	100
Yanhui Liang and Guodong Li	
Session 3: Model, Simulation, and Optimization	
A Study on the Mode of Combining Artistic Design Practice Teaching	
with Core Accomplishment Based on Simulation Experiment	104
Analysis and Research on Flood Real-Time Simulation of Middle and Small	407
Catchment	107
Experimental Study on Fiber Content in Asphalt Mixture	111
Experimental Study on Wastewater Treatment of Expressway Service Area in BAF	115
Erlong Jiao, Yanjuan Liu, Chundi Gao, and Yang Wen	
One-Variable Linear Regression Mathematical Model of Color Reading and Material Concentration Identification	119
Dehua Wang, Yujing Gao, and Zhiping Tian	
Rainstorm Flood Loss Analysis and Evaluation Model	123
Research on Image Encryption Technology Based on Multi Chaotic Mapping Buhailiqiemu Awudong and Guodong Li	127
Research on Segmentation of Grape Disease Based on Improved Watershed	400
Algorithm	132
Study on Scouring and Methods in the Downstream of Three Gorges	
Reservoir	136
Xu Geng and Zi-Hang Hu	

The Application of Mathematical Modeling in the Scheduling of Inspection Circuit	141
Dehua Wang, Yujing Gao, Dechang Xia, and Guiping Shi	
The Research of "96.8" Type Flood Simulation under Current Boundary	
Condition in the Lower Yellow River	144
Session 4: City Network and Communication	
A Preliminary Study on the Theory of Campus Planning in Metropolitan Universities in the Rapid Urbanization	148
An Improved Macro Model for Traffic Flow and Numerical Tests	152
Construction of Multi-Modal Information Resource Acquisition Strategy under Ubiquitous Network Environment	156
Analysis and Prediction of the Shanghai Composite Index Based on the Fourier Residual Correction FGARCH (1,1) Model	159
Real-Time Traffic Estimation with Incomplete Information under Urban Traffic Network	163
Liu Liangyun, Chen Shuyan, and Li Tao	
Research of Computer Network Data Transmission Routing Method	167
Research on the Application of Cloud Computing Technology in Library Digital Construction	172
Xin Li and Xiang Liu	
Research on the Fast Power Restoration Strategy of Distribution Network Based on MAPSO	175
Guan Haishuang, Qu Liping, and Yu Demin	173
Session 5: Big Data and Web Application	
Research on Architectural Design Tendency of Small and Medium-Sized Libraries Based on Lib2.0	180
Person Re-Identification Based on Multi-Level and Multi-Feature Fusion	184
Research and Design of Task Scheduling Method Based on Grid Computing Liu Feng and Guo Wei-Wei	188

Research of Distributed Data Optimization Storage Model in the Cloud Computing Environment	193
Research on the Application of Data Mining Technology in Campus Card System	199
Dan Su, Xiaoxi Liu, Tongjun Jiang, and Zhuoyue Li	
SLBP: An Improved Texture Feature for Pedestrian Detection	202
Study on Cluster Analysis of Prediction about Hail	205
Study on the Maintenance of Subway Equipment Based on Data Mining Techniques	209
Mo Zhi-Gang and Luo Han-Bin	
The Application Prospect of Scenic Spot Display Based on AR Technology	216
The Construction of Curriculum System of Artistic Design Professionals Cultivation and Practical Education Based on Simulation Experiment Pang Qincun	220
Session 6: Building Materials and Green Manufacturing	3
Analysis on Low Temperature Impact Toughness and Fracture Appearance of Q420 Angle Steel	223
Wang Xuming, Xu Lixin, Liu Hongyi, Guo Hui, and Gao Peiguo	
Analysis of the Influence of Base Structural Characteristics on Asphalt Pavement Cracks	227
Qi Chunling and Li Mo	
Localization of Nearest-Neighbour and Multilateration Analyse Based on RFID	230
Low-Temperature Water Mitigation Measures at the Jiudian Gorge Water Conservancy Hub Project at the Tao River in Gansu Province Chang Liu, Yanliang Du, Shiyan Wang, and Liang Wang	236
Research on Application of Angle Steel Q420 for Power Transmission Iron Tower in Cold Region	240
Research on Dynamic Mechanical Behavior and Damage of Steel Structure Galvanized Coating	244

Author Index	255
Review of Fiber Concrete High Temperature Burst and Repair Technology	252
Wang Xuming, Yang Fang, Yang Fengli, and Huang Yao	
Femperature	248
Research on Mechanical Properties of New Materials for Iron Tower at Low	