

2019 IEEE International Conference on Computation, Communication and Engineering (ICCCE 2019)

**Fujian, China
8 – 10 November 2019**



**IEEE Catalog Number: CFP19U94-POD
ISBN: 978-1-7281-3113-9**

**Copyright © 2019 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:	CFP19U94-POD
ISBN (Print-On-Demand):	978-1-7281-3113-9
ISBN (Online):	978-1-7281-3112-2

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

CURRAN ASSOCIATES INC.
proceedings
.com

Table of Content

Editorial	II
Table of Content	III
A kind of IFS fractal image generation method based on Markov random process	1
<i>Li-liang Zhang, Ting-Cheng Chang, Yan-Ming Mao</i>	
A Random Forest Regression Model for Predicting Residual Stresses and Cutting Forces Introduced by Turning IN718 Alloy	5
<i>Penghao Dong, Huachen Peng, Xianqiang Cheng, Yan Xing, Xin Zhou, Dongliang Huang</i>	
A Survey of Time-varying Structural Modeling to Accountable Cloud Services	9
<i>Jing Chen, Wencan Tong, Xiaojian Li, Yiyi Jiang, Liyu Zhu</i>	
A Survey on Default Prediction of Cloud Storage Service	13
<i>Liyu Zhu, Xiaojian Li, Wencan Tong, Cuiping Zhang, Bo Li</i>	
A Survey on Tracing for Default of Cloud Service	17
<i>Bo Li, Xiaojian Li, Wencan Tong, Hailan Wang, Jing Chen</i>	
A Trend based Forecasting Model Using Fuzzy Time Series and PSO Algorithm	21
<i>Yao-Lin Huang, Wen-Kuei Hsieh, Shih-Wei Lin</i>	
An improved adaptive firefly algorithm for PI parameter optimization of permanent magnet synchronous motor	25
<i>Shuwen Wang, Siwen Wang, Runtao Wang</i>	
An Intelligent Dumbbell Designed for Fitness Activity Monitoring	29
<i>Yang Liu, Chun-Liang Hsu, Yuan Liu</i>	
Anylazing and Selecting of DC-link Capacitor of Novel Three- phase AC-DC-AC Converter	33
<i>Shuwen Wang, Runtao Wang</i>	

Applying a Computer-assisted Concept-mapping Approach to the Improvement of English Reading Comprehension 37

Xianghu Liu, Chang Cai, Jih-Fu Tu

Applying Virtual Reality to the Control System for Status Judgment and Arrangement of Workpiece 40

Lay Gaik Teoh, Yu-Jui Tseng, Chin-Shan Chen

Artificial Dispatcher Based on Deep Learning and Expert System 44

Weihua Zhang, Zhaoyue Wang, Shaowei Ruan, Weijian Ou, Jianshuang Deng

Based on Public Health Service in Smart Medical Comprehensive Service Platform 48

Shaogeng Zeng, Minhao Wu

Bionic Optimization for Roller Crusher 52

Luojian Yu, Tong Xin

Build-up of Data Analysis Protocol of Leaf Quality Index on Autotoxicity of Soil 56

Haibin Wang, Xiaoting Chen, Jianghua Ye, Qi Zhang, Ding Li, Xianghai Kong, Xiaoli Jia

Closed Form Solutions to Displacement and Stress on Functionally Graded Rotating Disk with Exponentially-Varying Material Properties and Thickness 60

Wen Feng Lin

Data Analysis of Bioassay of tea plant soil on endogenous hormone of tea seedlings 64

Haibin Wang, Jianghua Ye, Xiaoting Chen, Yuhua Wang, Li Ding, Xianghai Kong, Xiaoli Jia

Defect Detection of Third Party Payment Processes in Android Applications 67

Yanhui Guo, Yuqing Gou, Wanrong Chen, Miao Zhang, Dawei Sun

Design and Implementation of SAE J1939 Vehicle Diagnostics System 71

B.V.P. Prasad, Jing-Jou Tang, Sheng-Jhu Luo

Design for the Evaluation System of Interdisciplinary Innovation Capability Based on Bibliometrics 75

Beibei Zhou, Minhua Zhou

Design of a Low-power Single-channel 8-Bit 1.25GSPS SAR ADC 79

Zhen Wang, Tian Zhao, Daiguo Xu, Guangbing Chen, Haiyan Zhu, Feng Liang, Guohe Zhang

Design of Optical Sensing System for Intravenous Drip Measurement 83

Hsing-Yuan Liao, Wei-Hsiung Tseng, Wei-Cheng Hsiao, Wen-Sheng Hsiao, Hsin-Yi Ma, Hsiao-Yi Lee

Detection of Exercise Fatigue Using Neural Network with Grey Relational Analysis from HRV Signal 87

Ting-Cheng Chang

Development of digital mine information platform based on Internet of things technology 91

Lvqing Yang, Dingzhao Li, Jiangsheng Zhao, Jintao Tang, Yishu Qiu, Jinsheng Lu

Development of Somatosensory Interactive Game System 95

Hua-Pin Chen, Wan-Shing Yang, Kuo-Wei Ho

Development of Virtual Tour Guide Integrating Instant Google Street Views 98

Wen-Kuei Hsieh, Shih-Wei Lin, Yao-Lin Huang, Wan-Shing Yang

Digitalization and Visual Platform Build-up of Traditional Handicraft Culture in Jiangsu Province 101

Ouyang Xinchang, Xu Jifeng

Driveline Vibration Reduction of Two-Mode Hybrid System 105

Hsiu-Ying Hwang, Tian-Syung Lan, Jia-Shiun Chen

ECG Automatic Identification Method based on BP Neural 109

Yan-Ming Mao, Ting-Cheng Chang

Effect analysis of grinding wheel under different dressing parameters on surface grinding quality 113

Lu Zhang, Mingxia Kang, Wencheng Tang

Effect of multi-pass welding thermal circle on the mechanical properties of SAW joints with SUS316L 117

Chen Zhang, Wencheng Tang

Effect of Transparent Capacitor on the Panel Uniformity of Bottom Emission AMOLED 121

Zhibin Han, Baixiang Han, Kuo Gao, Jianxin Liu, Liuqi Zhang, Gary Chaw, Shengdong Zhang

Effects of Computer Assisted Language Learning on Learner Autonomy 124

Xianghu Liu, Liting Sun, Jih-Fu Tu

Empirical Research on Soybean Futures Option Pricing Based on Weighted Least Squares Quasi-Monte Carlo 127

Lili Xu, Sujuan Pan, Ting Cheng Chang

Energy Efficiency Improvement with Hydraulic Electric Hybrid Vehicles 130

Hsiu-Ying Hwang, Tian-Syung Lan, Jia-Shiun Chen

Evaluating DNS Vulnerability to Cache Injection 134

Junqi Zhang, Wencan Tong, Liyu Zhu, Weinian Ou, Xiaojian Li

Four slot dynamic binary search anti-collision Algorithm 138

Luqing Yang, Beizhan Wang, Dingzhao Li, Jintao Tang, Yishu Qiu, Jinsheng Lu

Frequency-dependent oscillating wall stirrer for measurement of quality factor in a reverberation chamber 142

Jingkang Ji, Xiang Zhou, Peng Hu

Human Activity Recognition Based on Loss-Net Fusion Domain Convolutional Neural Networks 146

Zhang Ning, Lee Suk-Hwan, Lee Eung-Joo

Human Motion Law Based Design and Control for Sit-to-Stand Assisting Devices 150

Jin Li, Qiang Xue, Shuo Yang, Jingchen Guo

Human Motion Recognition Based on Improved 3-Dimensional Convolutional Neural Network 154

ZeYuan Hu, Eung-Joo Lee

Indoor Parking Navigation System Using Visible LED Light Communication 157

Mai Qiang, Liang Jiaming, Zhang Qinfeng, Hsu Chunliang

Innovative Design with Database of factors for Modern Woodwork 160

Han Gao, Jifeng Xu

Investigating Consumer's Intention for Ride-sharing Economy through Data Analysis from Didi Chuxing 164

Li-Wen Chuang, Shu-Ping Chiu, Tsai-Feng Kao, Yi-Chan Tu

Investigation into Ergonomics in Logistics Sorting Equipment 167

Yue Li, Lei Liu

MATLAB-based Multi-parameter Optimization of Bulk Current Injection Probe 170

Liangliang Zhu, Shenhui Jing

On Performance Analysis of LSU-EKF Parameter Estimation Method for Polynomial Phase Signal 174

Yong Wang, Huawei Xu, Cheng-Fu Yang

Optimal Design of Driving Simulator Scenario System Based on Speed Perception 178

Renfang Zha, Wencheng Tang

Photo-volatic Systems on Rooftops of Buildings; Kaoshiung City's Renewable Energy Endeavor 181

Min-Chang Wu, Chi-Ming Huang, Chun-Chang Chiang, Kuo-Sheng Kao, Da-Long Cheng, Yen-Yi Li, Chung-Ang Liu, Po-Ren Chung

Prediction of Casing Damage in Unconsolidated Sandstone Reservoirs Using Machine Learning Algorithms 185

Qing Tang, Hua Wu, Guoquan Teng, Hongguang Bu, Chaodong Tan, Jiankang Liu, Xiongying Zhang, Yanlong Zhang, Wei Yan, Jingen Deng

Problems of creation and usage of 3D model of structures 189

Dalibor Bartoněk, Michal Buday

Prokaryotic Expression and Purification of LscW Protein of Lawsonia intracellularis for biomedical engineering 192

MinZhang, Huifang Yin, Ailing Dai, Xiaohua Li, Xiaoyan Yang

Real-Time Threshold Voltage and Mobility Compensation for Large-Size AMOLED Displays 196

Dongwei Li, Wei Lu, Yufeng Jin, Gary Chaw

Research on Tangential Stiffnesses Solution of Horizontal Lathe Joint Surfaces and Dynamic Stiffness Optimization of the Whole Lathe Based on Modal Test 200

Zhang Haichuan, Zhang Jianrun

Research on Ultrasonic Creeping Wave Probe of Support Porcelain Insulator 204

Nan Yi

Screening Tracking Algorithm based on Ultra-Wideband Sensor for AGV tracking 207

Quanhui Wang, Jianjun Huang

Sculpture Design using 3D VR Technology with an Example of Nanjing Jiangbei New District 211

Yang Cao

Solving Maze Problem with Reinforcement Learning by a Mobile Robot 215

Shih-Wei, Lin, Yao-Lin Huang, Wen-Kuei Hsieh

Structure design of aluminum alloy solution furnace based on fluid-solid coupling numerical simulation 218

Yongbin Xu, Jianrun Zhang

Study on Profile of Laser Coaxial Powder Feeding Additive Manufacturing Based on the Contour-Like Method 222

Dongliang Huang, Qing Chai, Xiaoli Qiu, Yan Xing

Study on Thermoelectric Conversion and Conjugate Heat Transfer for PCBA by Finite Element Analysis	226
<i>Ah-Der Lin, Chih-Chung Cheng, Poon Sian Zheng, Cheng-Yi Chen, Ming-Chang Tsai, Chao-Ming Hsu</i>	
The Design of Android Phone Remote Control Password Lock	230
<i>Xing Cui, Bin Liu, Xiong Zhang</i>	
The Gelfand-kirillov Dimension of Quantized enveloping Algebra of $U_q(B_2)$	234
<i>Lingling Mao</i>	
Employed the Fingerprint Recognition Technology to Manage Smart Warehouse	238
<i>Chao-Yuan Cheng, Jih-Fu Tu</i>	
The IR Drop Effect of 2T1C and 3T1C Driving Modes in Top Emission AMOLED	242
<i>Zhibin Han, Baixiang Han, Kuo Gao, Jianxin Liu, Xiaoling Wu, Gary Chaw, Shengdong Zhang</i>	
The Performance of Grey Model and Auto-Regressive Integrated Moving Average for Human Resources Prediction in China	245
<i>Ting-Cheng Chang</i>	
The Research of Wireless Charger by Inductance of Induction Coil	249
<i>Kai-Chi Chuang, Jih-Fu Tu, Tian-Syung Lan, Lie-Ping Zhang</i>	
The Study of Cooperative Diversity Scheme for Indoor Visible Light Communication	253
<i>Bao Jingjing, Wang Junjie, Hsu Chunliang</i>	
Author Index	256