Table of Contents

Research on Semantic Recognition Technology of Network Public Opinion and Construction of Recognition Process Based on Artificial Intelligence Method	1
Yan Zhangling, Li Lin	
Research on Design and Implementation of Power Dispatching Automation System Based on Big Data Analysis	7
Wang Cui, Zhang Wenxia, Wang Jianping	
Application of VR Technology in Entity Bookstore: A Case Study of "Reading Tunnel" in Bookstore	14
Zhang Weidi	
Research on Scenario and Testing Method of Auto-driving Vehicle Collaborative Testing on Expressway	19
Wei Lei, Chunjie Li, Xuan Lv	
Research on Internet Technology and Operational Research Based on Interval Fuzzy Number to Realize Online Aided Decision-making System	26
Gu Xiao	
Research on Technology Scheme of Railway Video Cloud Platform	31
Yu Zhijun	
A Preliminary Study on the Present Situation and Future Development of Natural Language Processing	38
Liu Junlan	
Load Balancing Method for Tilting Data Connection on MapReduce Platform	42
Cheng Junjing, Cheng Shengyang, Ben Nnegjun	
Research on the Improvement of Optimal Location Algorithms for Ship Communication and Navigation Equipment	47
Su Wenming	
Design and Application of Virtual Reality Technology in the Development of Game Industry	52
Tang Maogao	
Design of Intelligent Collision Detection System for Multi-robot Body Based on 3D Vision Technology	57
Zhang Yang, Liu Shijie	

Research on Computer Network Security Preventive Strategies in the Big Data Era	61
Yuguang Ye, YanLing Zheng	
Research on Knowledge Management System of Financial Sharing Service Center	66
Bai Jing, Dai Chunlei	
Optimizing Research on Intelligent Financial Decision Supporting System: A Case Study of Financial Analysis Function	71
Dai Chunlei, Bai Jing	
Database establishment and application based on BIM technology in assembly construction	76
Yuguang Guo, Honggang Zhai, Yinfeng Zhang, Shouping Liu, Xinyue Guo	
Research on Link Design and Power and Rate Control Technology of Short Wave Communication System for Marine Ships	81
Su Wenming	
Research on Computer Information Technology and Network Security Application	86
Chen Meng	
Research on Wearable Smart Clothing for Life	91
Zhou Zhuguo	
Comparison and Simulation of Tuning Methods for PID Parameters	96
Chen Wei	
Design and Application of Power Lithium Ion Battery Management System	100
Yinquan Hu, Heping Liu	
Unit geological disaster survey technology based on aerial survey image of small unmanned aerial vehicles	104
Tang Yi	
Research on Optimization of Logistics Vehicle Transportation Path Based on Customer Fuzzy Demand Perspective	108
Wu Xing, Zhang Renchong	
Establishment and Perfection of Information System of Modern Educational Administration	112
Shao Yanna	
Design and Implementation of Network Malicious Traffic Screening and Analysis System Based on Big Data Platform	116
Xu Gang	

Variable Operator Image Contour Recognition Algorithm Based on Edge Sharpening	120
Liu Shangzheng, Liu Bin	
Naive Bayesian Classification Algorithm for Infrared Remote Sensing Image Based on Elastic Model	125
Liu Shangzheng, Liu Bin	
Research on Blind Detection Method of Shortwave Communication Electronic Signal Based on Wireless Network	130
Wang Ying	
Research on Machine Identification and Feature Extraction Technology for Traffic Congestion in the City	136
Haitao Guo, Lunhui Xu	
Design of Parallel Large Data Stream Transmission System Based on Migration Learning	140
Xiwu Zheng	
Research on the Application of Fractional Calculus in Statistics	148
Guo Qianru	
Analysis on the Quantitative Evaluation Method of Hierarchical network Security Threat Situation	152
Sun Zuntao, Wang Yuping, Wu Huiyun	
Application Research of Expression Recognition Based on Image Analysis in Animation Production	156
Tang Linye	
Application Research of Engine Technology in 3D Animation Production	161
Tang Linye	
Application of Artificial Intelligence Algorithms in Special Scene Recognition	166
Liang Yuanzhen	
Omnidirectional speech recognition control car system	17 0
Honghu Xie, Qiong Chen	
Optimization Research on Automobile Energy Recovery System	177
Zhang Chao, Yang Miaomiao	
Application of PLC Technology in Industrial Automation Control	182
Wu Weizhen, Lai Jiazhu	
Research on Knowledge Fusion of E-commerce User Data	187
Meng Cong	

Third-Order Differential Variational Principles and Differential Equations of Motion for Mechanico-Electrical Systems	192
Xiangwu Zhang, Naiping Wei, Yuanyuan Li, Xiaoxia Zhao, Wenfeng Luo	
Research on Requirement Information Architecture of Civil Aircraft Development Flight Test	200
Peng Yang, Cuiping Jing	
A Structural Model of Error Factors in Mathematical Problem Solving Based on NVivo Qualitative Analysis	201
Yanwei Peng, Sanfu Wang	
Design and Application of Agricultural E-commerce Intelligent Voice Drive System	211
Sun Xinlu	
Analysis of Computer Big Data and Cloud Computing Network Technology	215
Mengyu Shi	
Application and Research of Computer Big Data in Internet Learning	219
Zhijian Chen	
Research on Key Technologies of Personal Learning Service Based on Cloud Computing and Big Data Analysis	223
Wenjie Hu	
The Study on Network Detection Mechanism of Multi-zone Computer Room Simultaneous Transmission	228
Qiu Ziliang, Chen Rui, Yan Mengqiu	
Research based on the Application of GIS Technology in Forecasting and its Geological Disasters	233
Lifang Fan	
Application Analysis based on the Satellite Remote Sensing Technology in Environmental Protection	237
Zhao Yu	
Prediction of Hang Seng Index Based on Machine Learning	241
Weiqin Wang	
Research on the Construction of CRM Software System in Forest Tourism Service Enterprises	246
Qiaoting Zhou	
Research on Automatic Comparison System of Vehicle Tire Characteristics Based on Quick Query of Traffic Accident Vehicles	250
Shuai Liang	

Study of Getting Spectra of Doppler Signals Based on its Audio Signals	256
Donghua Luo, Junhui Qiu	
Design and Implementation of Campus Recruitment Website Based On N-tiers Architecture	262
Meiyu Pang, Li Wang	
Research on Control Strategy of High Speed and High Precision Motion Platform	267
Weili Tan	
Interactive Design Optimization of Dingdong Software Products Based on User Participation	272
Zhao Xiaoliang, Luo Qionglu, Zhang Lingyan, Wu Caiye	
Speech recognition method based on artificial intelligence	277
Zhang Hao	
Design and Realization of Intelligent Furniture based on Modern High-tech	281
Jia Zhenming, He Yisheng	
Design and Implementation of College students' Physical Health Test System based on Data Mining	287
Li Min	
Application of Big Data Technology in Enterprise Human Resource Configuration Strategy	293
Zhang Chen	
Application Research of Real-time Integrated Module and Engineering Measurement System Design for Airborne 3D Laser Scanning	300
Lijun Wei	
Design and Implementation Analysis of Database Network Management System Based on Data Mining Algorithms	309
Lan Yang, Gejing Xu	
Research on Temperature Control of Single Crystal Furnace Based on Neural Network	314
Xudong Zheng, Yilang Tu, Xudongzheng, Xutao Mo	
Movement Mode Analysis of an IPMC Bionic Bluetooth Turtle	321
Yingjie Ma, Xuchao Song, Yinlu Zhang, Yongcan Liu, Xin Liu, Jiaxi He	
Analysis of Computer Network Security and Countermeasure Based on Big Data	325
Xiaohu Ge	

Research on Remote Sensing Image Restoration from Low Resolution to High Resolution Based on Deep Learning	329
Cong Gao, Yang Zhao, Chuanchang Si	
Application Research of Virtual Reality Technology in the Protection of Chongqing Celebrities' Former Dwellings during the Second Sino-Japanese War	334
He Yuan, Yuan Hong, Long Bin, Peng Lili, Xu Xiaoyu	
Application and Research of RFID Sensor in Switchgear	340
Peng Jia, Mao Wenqi, Gan Shengliang	
Research on Operation and Maintenance Technology of Electrical Equipment in Hydropower Station Based on Data Mining of Internet of Things	347
Zhao Yuzhong, Tian Ronghai, Wang Jun, Wang Jie, Qiu Mianqian, Chen Chen	
Study on Optimization of monitoring and early warning system for hydropower plant equipment safety implementation based on big data Era	350
Wu Xiaodong, Zhang Wenyuan, Fu Jun, Tang Shan, Dai Jianjun, Xu Tao	
Research on Blockchain-Based Rural Financial Smart Platform	357
Zhang Liucheng, Chen Meizhi, and Lei Qinru	
Accounting information system based on block chain technology perspective data reliability research	367
Zhang Liucheng	
A Study on the Application of Information Technology to Foreign Policing Translation	372
Xiang Li	
Research on the Transformation of Guangdong Retail Development Model under Big Data Technology	378
Zheng Guokai, Yi Luxia	
Display Application of Risk Control of Power Grid Operation Based on VR/AR Technology	384
Qiwei Peng, Xiaoling Jin, Changqing Xu, Dan Lu	
Research on Evaluation Method of Failure Probability of Communication Equipment	388
Gao Jing	
Design of power multi-channel data acquisition system	396
Huo Fuguang, Hang Shuai, Wang Yiding, Cao Chuang, Ding Zushan, Zhang Bin, Huang Yanqing	
Discussion on the Construction of Computer Image Scene Based on Virtual Reality Technology	401
Yang Ling	

Smart Grid Security Situational Awareness Based on Large Data Analysis	406
Hesong Ye, Jun Xu, Zhijie Zhu	
Distribution network integrated operation optimization management based on Network Reconfiguration Technology	410
Xinyong Fu, Pingzhen Shao, Haizhu Luo	
Analytical Techniques of Network Public Opinion under Big Data Environment	415
Fengxia Cong, Yongchang Ren	
Design of Enterprise Innovation Resource Allocation Scheme Based on Multi-objective GERT Network	420
Yansong Li, Jianfeng Lu	
Network Threat Intelligence Analysis Based on KNN Classification of Knowledge Atlas Characteristics	425
Wang Wenting, Zhang Hao, Liu Donglan, Liu Xin, Jing Junshuang	
Research on Path Planning of Mobile Robot Based on Binocular Perception	430
Dezhong Zhao, Ruiqi Wang, Weizheng Wang	
A New Approach to Testing BGRU Text Affective Analysis	436
Tian Li	
Application and research of fault location system for distribution network based on big data platform	442
Meifang Cai	
Research on Vision Navigation of Weeding Robot Based on Image Processing	446
Cai Jinjin, Wang Ruiqi	
Application and Development of Artificial Intelligence in Forensic Science under the Background of Big Data	451
Ying Yuan, Qian Dai	
Intelligent City Construction and Planning from the Perspective of Big Data	457
Yuan Zeng	
Analysis of Overlapping Community Based on Complex Network	461
Xiaoyuan Xu	
Research on Fault Diagnosis Method of Coolant System in Nuclear Power Plant	466
Qiu Pinda, Ye Liqiang	
Research on Logistics Vehicle Routing Optimization Based on Improved Ant Colony Algorithm	471
Wang Xiufan	

The Simulation and Realization of Palletizing and Handling Production Line by Industrial Robot Based on Augmented Reality Technology	470
Wang Wei, Li Yongmei	
An Online Medical Service Platform Based on the Internet	481
Yufeng Cai, Hailong Bao and Mingqi Zhao	
Design of Traffic Light Based on Camera Intelligent Setting	485
Lin Jia, Siyi Wei and Jing Guo	
Research and Development of Intelligent Greenhouse Steward Control System	490
Wanyu Jin Xiaoman Shi and Yan Wang	