

International Conference on Smart Technologies and Systems for Internet of Things (STS-IOT 2021)

Atlantis Highlights in Intelligent Systems Volume 2

Online
19 December 2021

Editors:

**Zheng Xu
Jun Ye
Weidong Liu**

ISBN: 978-1-7138-5775-4

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.

Copyright© (2022) by Springer Nature
All rights reserved.
Copyright for individual electronic papers remains with the authors.

For permission requests, please contact the publisher:

Springer Nature
The Campus 4 Crinan St.
London N1 9XW
United Kingdom

www.springernature.com

Printed with permission by Curran Associates, Inc. (2022)

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

Construction of Classroom Dynamic Evaluation Model Based on Internet of Things.....	1
<i>Yinling Li</i>	
Evaluation of Local Transformation Ability of Technological Achievements Based on Entropy Method	7
<i>Xiaoyu Wang, Yuxin Zhao, Qian Wang</i>	
Reflections on Machine Scoring in Business English Writing Under the Background of Big Data	12
<i>Wenyi Ding</i>	
Application of Three-Dimensional Simulation Technology in the Expansion and Innovation of Graphic Design to Three-Dimensional Space	16
<i>Jielan Zhou</i>	
Design and Implementation of Analysis System Based on Data Mining	21
<i>Wen Pan</i>	
Analysis of Marginal Effect of Ability Improvement Based on Simulated Training Equipment.....	26
<i>Fei Gao, Ou Qi, Fanghuai Gou, Jianfeng Song</i>	
Application of Blockchain Technology in College Teacher Evaluation System.....	30
<i>Jieyu An, Binfen Ding</i>	
IPPR of Traditional Wooden Building Section Based on Deep Learning	36
<i>Xiaodan Liang, Haoming Dong</i>	
Improving Strategy of Agricultural Products Logistics on the Basis of Supply Chain	43
<i>Na Wei, Danhong Chen, Dejing Wang</i>	
Research on Reader's Reading Promotion in the Digital Age.....	49
<i>Jianqiong Li</i>	
Privacy and Security of Internet of Things Data in Financial File Management.....	55
<i>Lili Fan</i>	
Application of Computer Aided Numerical Calculation Method and Artificial Intelligence in Technology Innovation Analysis.....	61
<i>Hongzhen Zhang, Ya Dong, Xia Hua</i>	
Research on AI-Assisted Teaching Mode for English Teaching from the Perspective of Total Physical Response (TPR)	68
<i>Jingtai Li, Rong Wen</i>	
Development of Intelligent Technology for Sports Training	73
<i>Haisheng Zou</i>	
Application of 3D Printing Technology in the Construction Industry and Its Development Prospects	79
<i>Jian Yin, Yiru Suo, Tao Lv, Kaisi Ma, Xincheng Wang, Zhonghua Zhang</i>	
Internet of Things Analysis in Classroom of Visual Communication Design Specialty	86
<i>Hua Zong</i>	

Flipped Classroom Mode of Cloud Computing and Internet of Things Visual Data Analysis.....	92
<i>Yingying Wang</i>	
Application of Chinese Folk Art in the Computer Design Assistant System of Modern Art	98
<i>Juan Tan</i>	
Application and Optimization of Wavelet Threshold Denoising Algorithm in Signal Processing.....	103
<i>Zhen kong, Shuo kong</i>	
Energy Big Data Application Based on Energy Big Data Center.....	108
<i>Jia Liu, Jiangbo Sha, Zhenhua Yan, Rui Ma, Dongge Zhu</i>	
Analysis of (r,Q) and (s,S) Spare Parts Ordering Strategy Under Maximum Inventory Constraints	114
<i>Ou Qi, Lei Zhang, Jiuchao Li</i>	
Logit Analysis of Residents' Life Satisfaction Based on Big Data	118
<i>Jia Huang</i>	
Development of Digital Inclusive Finance Based on Blockchain Technology	123
<i>Minghong Sun</i>	
Design and Implementation of Financial Intelligent Data Management	128
<i>Liwen Zuo</i>	
Research on Evaluation System of Comprehensive Effects of Implementation of Technological Innovation Projects in Power Grid Enterprises.....	135
<i>Guang Yang, Wei Li, Di Fang, Cuiliu Liu</i>	
Analyze the Application of Big Data and Artificial Intelligence Technology in Computer Network.....	143
<i>Hao Hong</i>	
Natural Image Classification Method Based on Deep Learning.....	148
<i>Mingwen-Chi</i>	
Blockchain + Industry-Education Integration Enterprise: Coupling Path and Platform Construction	154
<i>Xin Zhang, Pengmin Jia</i>	
Research on the Influence of Artificial Intelligence Technology in English Personalized Teaching	159
<i>Jingtai Li, Heyuan Huang</i>	
Construction of Sharing Mode Based on VR Technology Under the Background of Big Data.....	164
<i>Yi Qi, Gen Jincheng</i>	
Peer-Review Statements	170
<i>Zheng Xu</i>	
Design and Implementation of Internet of Things Big Data in Computer Application Basic Course Examination System.....	171
<i>Caihua Kong</i>	
DEA-Based Achievements Estimate of Technology Investment	177
<i>Qian Wang, Yuxin Zhao, Xiaoyu Wang</i>	
Design of Internet of Things Analysis and Management System for Quality Data.....	182
<i>Peng Xue, Min Liu</i>	

Application of Multisensor Technology in Training	188
<i>Mengran Niu</i>	
Knowledge Map Construction and Visualization with Weight	193
<i>Ming Zhao, Yingxu Tai, Shoujin Wang, Yiwen Li</i>	
Application of BIM Technology Based on Big Data Analysis in Autonomous Learning of Civil Engineering Teaching.....	198
<i>Ya Qin</i>	
Digital Transformation and Development of Provincial Power Grid Enterprises	204
<i>Mingxia Zhu, Zhenjian Xie, Zhe Wang</i>	
Autonomous English Online Learning System Based on Web	209
<i>Jiaying Liu</i>	
Comprehensive Evaluation of Distribution Network Project Cost Management Effectiveness Based on Big Data.....	214
<i>Xiang Gao, Yuanke Zhou, Yue Tang, Jinghua Liu</i>	
Optimization Model Research Based on Partial Least Squares Method.....	220
<i>Huilan Jin, Zhenrong Zhang, Liyan Xu, Hong Fang</i>	
Intelligent International Marketing System and Marketing Method Based on Big Data.....	227
<i>Wei Hao, Yanan Wang</i>	
Based on the Path Selection of College Smart Class Culture Shaping Under the Background of “Internet +” Era	231
<i>Xun Zhu</i>	
Enterprise Financial Management Informatization Under Cloud Computing Environment	234
<i>Xiaohua Zhou</i>	
Innovative Design of a New Type of Civil Aviation Aircraft in the Epidemic Era.....	240
<i>Qinghan Yang, Lijun Xu, Xinke Pan, Guodong Liang, Xin Chen</i>	
Intelligent Question Answering System for Internet of Things Data Analysis and Educational Technology	246
<i>Yanzhuang Chen</i>	
Analysis of Visual Communication Design of E-Commerce Platform Based on Internet Technology	252
<i>Hongbo Sun</i>	
Application of Assembly Construction in Intelligent Construction Under the Background of Artificial Isntelligence	258
<i>Min Yang</i>	
Analysis of Educational Big Data Mining Based on Deep Learning Technology.....	264
<i>Jianwu He</i>	
Development of Chinese Animation from the Perspective of Computer Evolution.....	270
<i>Namin Mi, Alexey Sukhov</i>	
Parameter Matching of Open Winding Permanent Magnet Synchronous Motor Based on Performance Requirements of Electric Vehicle.....	275
<i>Zhiwen An</i>	

Construction of Humanistic Training Mode of Self-Learning Applied Talents Based on Internet of Things.....	278
<i>Xiaoyan Yin</i>	
Application of Internet of Things Data Analysis in Innovation and Entrepreneurship	284
<i>Feng wang</i>	
Design of Intelligent Pronunciation Training System Based on Android Pslatform	290
<i>Mingming-Ding</i>	
Design and Implementation of APP Information Platform System for Precision Poverty Alleviation Based on Rural Tourism	296
<i>Tao Wang, Xiaojuan Liu, Amar Jain</i>	
E-Commerce Service System for Cloud Stall Application of Big Data	303
<i>Jing Liang</i>	
3D Creative Design of Cheetah Running Form.....	309
<i>Ziwei Xu</i>	
Research on Translation Corpus Building with the Assistance of AI.....	318
<i>Xiaoqing Hou</i>	
Design and Application Analysis of College Students' Psychological Early Warning System Based on Mining Algorithm.....	323
<i>jun Liao</i>	
The Application of GIS in Studying the Route of Qing People Entering Xinjiang	328
<i>Danyang Gong</i>	
Fuzzy Clustering Prediction and Improvement Path Analysis of University Students' Physique.....	332
<i>Jinmao Tong, Fei Wang</i>	
Separate Source Predictive Control of Gas Emission Based on Psobp AdaBoost.....	337
<i>Tao Xu, Tong Cheng</i>	
Deep Learning Based Optimization Model for Digital Currencies and Investment Portfolios	343
<i>Jieyan Dong</i>	
Research and Application of Film and Television Sound Dynamic Effect Design System Based on Artificial Intelligence.....	349
<i>Jing Niu</i>	
Virtual Simulation Teaching Course Design Based on Internet of Things Data Transmission.....	355
<i>Gao Yushu</i>	
Development History and Current Situation of Resistor Array Technology at Home and Abroad.....	362
<i>Yichong Xu, Jian Chen, Shouyi Liao</i>	
Text Generation Image About Gan	367
<i>Sijia Ye</i>	
Analysis of the Degree of Influence Between Network Public Opinion and Its Response to Corporate Sales and Stock Prices: Taking the Xinjiang Cotton Incident as an Example	372
<i>Ming Zhao, Yiwen Li, Shoujin Wang, Yingxu Tai</i>	

Application of Internet of Things Big Data in Early Waring Management of Enterprise Human
Resource Crisis..... 376
 Yang Yu

Construction of College Students’ English Autonomous Platform Based on Virtual Cloud Terminal
System 382
 Heng Wang

Author Index