2nd International Conference on Intelligent Design and Innovative Technology (ICIDIT 2023)

Held Online

Atlantis Highlights in Intelligent Systems Volume 10

Chengdu, China 4-6 August 2023

ISBN: 978-1-7138-8280-0

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.

Print copyright© (2024) by Atlantis Press (part of Springer Nature) All rights reserved.

Copyright for individual electronic papers remains with the authors.

For permission requests, please contact the publisher:

Atlantis Press Van Godewijckstraat 30 3311GX Dordrecht The Netherlands

contact@atlantis-press.com

Printed with permission by Curran Associates, Inc. (2024)

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

Research on UI Design of Folk Arts and Crafts Commercial Application Software Based on KANO Model	4
Mingyi Qu, Dongming Ma, Hao Qian, Ziqi Wang	
Space Experience Exhibition Design Huawei 5G Brand	15
Research on the Intelligent Design of a New Home Physical Therapy Instrument Based on Voice Interaction	27
Tianshuang Zhang, Zongming Xia, Yunfeng Ma	
Research on App UI Optimization Design of Rental Mobile Phones in the Digital Media Era	35
Research on UI Design of Touch Screen Interface of Intelligent Classified Trash Can Based on Green Design Concept	44
Research on the Design of Health Management System Based on Community Rehabilitation	52
Research of Drowning Autonomous Rescue Product Based on Swallowing Monitoring	66
Research on Water Special Life Jacket Based on AEIOU Method	74
Design and Research of Tableware Cleaning Machine Based on Kano Model	82
Research on 3D Digital Ink Art	89
Design and Kinematics Analysis of Folding Mechanism of Patient Stretcher	98
Numerical Analysis and Calculation of Urban Landscape Spatial Pattern	113
Design of City Park Landscape Roaming System Based on Virtual Reality Technology	120
Furniture Design for the Elderly Based on the Artistic Conception of Chinese Culture	129
Design and Research of Automatic Carpet Laying Machine	146
Research on Voice Control and Analysis Technology for the Elderly at Home	152

Comparative Study on the Display Effect of Particle Animation in Gas Atomization Pulverization Equipment	163
Borui Guo, Yi Wang	103
Research on Interactive Jewelry Customization Design Driven by Intelligent Technology	172
Application of Artificial Intelligence Based on Symbiosis Theory in the Design of Landscape Park Xiuli Qu, Haiyong Shen	183
Prediction Study Based on TCN-BiLSTM-SA Time Series Model	192
HSB Color Strategy Model Based on Color Cognition and Color Emotion	198
Design and 3D Visualization Simulation of Smart Home Based on Virtual Reality Technology	205
Design and Implementation of Interactive Virtual Runway System Based on Unity	212
StackGBM: Stacked Gradient Boost Machine for Accurate Lost Circulation Prediction	225
A Study on the Correlation Analysis Between Product Cognitive Features and Visual Features	234
Research on Kansei Characteristics of Electric Toothbrush Products Based on Big Data	241
Development Mode of Intelligent System for Discrete Manufacturing	250
Research on the Gamification Design of Museum APP Based on MDA Model	264
Research on the Design of Cultural and Creative Products from the Perspective of Tianjin Intangible Cultural Heritage	278
Application Research of Installation Art Based on Digital Media	289
Design of Marine Fishery Service System Based on Sustainable Concept	298
Development and Application of Intelligent Packaging Design Under the Background of Artificial Intelligence	308
Chaowei Wang, Lanyu Liu, Zheng Wang	
Research on the Design of Vehicle-Mounted Full-LCD Instrument GUI	319
Interface Design of Sports App Based on Joint Analysis Method	328

A Study on the Application of Generative Artificial Intelligence Technology in Image Design	338
Research on Intelligent Garment Design Platform Based on GPT AI Technology	351
Color Quality Evaluation of Urban Street Buildings Based on Artificial Intelligence and Street View Images: Taking Zhongshan Road Historical and Cultural Street in Shenyang as an Example	360
Research on UI and Intelligent Product Design of Prefabrication System for Urban White-Collar Work Meals Under the Background of Healthy China	370
Research on Channel Management Based on UAV Application Technology	379
From "Deduction" to "Consciousness"The Change of Artistic Behavior of Interactive Image Installation Works in the Era of Digital Art	388
Research on the Countermeasures of Urban Community Renewal Design Under the Background of Digitalization	397
Research and Implementation of E-Commerce Advertising Content Optimization Based on Artificial Intelligence	404
Research on the Design of Museum Cultural and Creative Products Based on the KANO Model	411
Structure Design of Furrow Fertilizer Machine in Apple Orchard	417
Design and Experiment of Complex Trajectory Cam Based on MATLAB	426
Generation of Digital Artistic Images Based on GANs	438
Design of Intelligent Garbage Bin Supervision System	445
Exploring the Application and Influence of Artificial Intelligence AIGC Technology on Logo Design	451
Research on Emotion Evaluation Model Based on Automobile Style Keywords	460
Research and Practice of the New Mode of Tourism Service by Digital Twin Technology Based on UAV-Taking Sanjiang Gaoyou Village as an Example	471

Adaptive Convolution Kernel for Painterly Image Harmonization	478
Design of Cooling Water Circulation System for Vacuum Moisture Regain Machine	485
Construction of 3D Visualization Platform for Visual Communication Design Based on Virtual Reality Technology	492
Research on Welding Process Simulation Training Technology Based on Virtual Manufacturing	499
Research on Museum Display Design Based on Immersive Virtual Reality Technology	508
Stadium Integrated Service Equipment Control Program Design	518
Research on Intelligent Signage of Urban Parks - Taking Shenyang Nanhu Park as an Example	533
A Evaluation of the Application Effect of Virtual Simulation Technology Based on Intelligent Design in Vocational Skills Training Bo Zhao, Zhaoqi Li, Dexter A. Soguilon	544
A Study of Smartphone Assistive Devices for the Elderly Based on User Experience	554
Research on the Function of Digital Technology in Modern Ceramic Art Creation	567
Application of Recommendation Algorithms in Product Art Design: Challenges and Applications Tao Wang, Wa An, Kaixi Huang	576
Research on the Application of Commodity Packaging Design in the Information Age	582
Research on the Interactive Design of Safety for Children's Food Packaging	590
The Impact of Environmental Background and Landscape Design on Landscape Preference and Restorative Perception	600
Quality Evaluation of Accounting Information Based on Multi-Layer Neural Network	609

Author Index