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Retraction

Retracted: Construction of a Large Visual Landscape Design Platform considering Low-Carbon Environmental Protection Based on Nanomaterials

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

(1) Discrepancies in scope
(2) Discrepancies in the description of the research reported
(3) Discrepancies between the availability of data and the research described
(4) Inappropriate citations
(5) Incoherent, meaningless and/or irrelevant content included in the article
(6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

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[1] X. Chen, "Construction of a Large Visual Landscape Design Platform considering Low-Carbon Environmental Protection Based on Nanomaterials," *Journal of Nanomaterials*, vol. 2022, Article ID 8836835, 9 pages, 2022.

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Research Article

Construction of a Large Visual Landscape Design Platform considering Low-Carbon Environmental Protection Based on Nanomaterials

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Due to the diversity of design data, the display effect of landscape design is not ideal. Based on the analysis of the requirements of low-carbon landscape design, this paper constructs the hardware condition based on the data acquisition sensor, digital controller, image scanner, data storage device, and power control device and carries out Delaunay triangle netting for the terrain data preprocessed, reduces image shaking by introducing discrete elevation, and improves the image clarity by matching and optimizing the seed points of edge correlation to achieve high-quality visualization of landscape design. The test results show that the design platform can show the design effect completely and clearly.

1. Introduction

The trend of the integration of low-carbon environmental protection concept and landscape design development is to develop the elements needed in the design on the basis of local conditions. People's access to information is increasing with the acceleration of the globalization process. Based on the concept of low-carbon environmental protection, national culture plays an important role in increasing the competitive advantage of landscape design works and effectively conveying information [1–3]. The integration of various ethnic cultures and low-carbon environmental protection concept in the process of landscape design can effectively enhance the vitality of the works [4]. Under the concept of low-carbon environmental protection, the development of landscape design is mainly embodied in the concept of low-carbon environmental protection, in which the importance of computers is increasingly emerging, which is its essential basic tool [5–7]. Nowadays, with the continuous upgrading of social science and technology, the widespread popularization and rapid development of computer networks have become an important auxiliary means for the realization of landscape design, shifting the information medium of landscape design under the concept of low-carbon and environmental protection from reality to virtualization [8–10]. In the landscape design work, the various forms of the computer network to work more automated, but also for the landscape design provides more space and larger performance and development platform. The expansion and popularization of landscape design under the concept of low-carbon environmental protection and the world becoming a "global village" benefit from the realization of the Internet [11, 12]. With the help of the Internet, the way of information communication has changed from the traditional way of information communication with small scope and slow speed to the way of landscape design. Landscape not only for the world audience, but also to reduce the use of paper and other related media, also played a very good role in the protection of environmental resources. Improvement in landscape design depends on the development of digital imaging technology [13–15]. Visual image technology can realize the processing of information, image, audio, and text, realize the integration of picture, text, and audio, make the landscape effect fully displayed, simulate the real scene, make the communication between people more free and convenient, and satisfy the people's participation [16–20]. For example, a brand of mobile advertising, people want to play music, DV editing, and other works only need to touch the air screen, that is, through the digital image to show the virtual future of life, fully enhancing the rendering of the landscape [20–24].

For the time being, some theories define visualization as a technique that utilizes computer graphics and image processing techniques to interactively manipulate images of data into images or graphics that can then be displayed on a computer screen. In the traditional concept, visualization means visualization. What is discussed here is visualization technology after the use of computer technology and visualization. It is emphasized here that when computer technology has not been widely used, all the results of visualization technology cannot be achieved interactively. When computer technology is applied to visualization concepts, its contents involve many fields such as computer graphics, computer-aided design, image processing, and computer vision, and visualization technology can achieve the interactive behavior required in contemporary design. This is also a major breakthrough in visualization. In essence, visualization is a part of virtual reality. Its basic meaning is that a large amount of nonintuitive, abstract, or invisible data generated in scientific computing can be expressed visually and visually by means of computer graphics and image processing technology and can be interacted for people to understand and perceive. This is a new technical field. Visualization technology provides us with a three-dimensional, global, simulation, and real-time interactive ability to solve problems. It greatly enhances our work efficiency and enables us to abandon the original creative thinking of the fixed language, jumps out from the original constraints, and has more space to imagine and demonstrate its results in the most intuitive way. Visualization technology allows us to communicate and interact with nature through specific information and data, thus obtaining the most data resources. At present, there is still no exact definition of landscape visualization, which generally includes two aspects: one is the visualization of landscape data, models, and relationships, and the other is the visualization of landscape and changing environment. It generally has the following characteristics: immersion, interactivity, and intelligence.

Based on this, this paper designs a large visual landscape design platform considering the concept of low-carbon environmental protection, in order to fully combine the design with the real scene, give a more intuitive feeling, and improve the three-dimensional design. Through this study, it also hopes to help the display of landscape design to provide a reference.

2. Building Principles of a Visual Landscape Design Platform considering the Concept of Low-Carbon Environmental Protection

2.1. Landscape Design Highlights Humanization. In recent years, due to the rapid development of digitalization, people's demand for different aspects is also increasing, but today's digital technology cannot fully meet people's demand for continuous improvement. The key is that people pay more attention to humanized design, no matter what kind of design must highlight humanization, to have human touch. Therefore, in order to highlight the humanized design, in line with contemporary human needs, landscape design will not only connect people with people but also to further understand people's living habits and spiritual needs. The key reason why the landscape can restrict the implicit traditional form of expression is the strong intuition of the landscape. With the emergence of digital technology, a large number of designers are actively committed to the transformation of traditional concepts. In landscape design, there have been some humanistic cares to enable people to more intuitively understand the true meaning of works to be conveyed.

2.2. Effectively Embody the Theme of Environmental Protection in the Design. Human beings live on the same planet. For the sustainable development of future generations, environmental protection is the most important issue of common concern throughout the world. However, the most crucial issue behind the environmental protection is human nature. Against the backdrop of a developing society and a growing population, human predation of nature has reached its peak, and a series of problems have arisen, such as the deterioration of natural resources and environment, the disappearance of plant and animal species, and the serious pollution of soil and water resources. In the context of contemporary development, there have been many public service ads in an effort to call on people to protect the environment, love life. With the improvement of people's awareness of environmental protection and a renewal of designers' thinking, designers pay more attention to the earth's ecological environment and human life. Therefore, in their design, combined with the current problems, the theme of the design will be "protect the environment, everyone is responsible." This theme in the contemporary context highlights the concern for the humanities, attention to human nature.

3. Hardware Design

The construction of a large-scale visual landscape design system needs a lot of complex models and environments, real-time scene calculation, and display, so it needs computer hardware support. Usually, the higher the configuration, the better the result. The system is installed on a laptop with a Core 4 Duo 2.5 GHZ processor, 8 GB of RAM, and a GeForce GTX 850M graphics card. This means that it is portable and can also be set up remotely, such as at an expert seminar or a public advisory meeting. It can control the screen, although using two screens or a projector is more convenient. Based on this, the platform's hardware is composed of data acquisition sensor, digital controller, image scanner, data storage system, and power control system. In addition, the digital platform of the landscape also includes the TPM image analysis chip and the connection module of system modules such as data conversion connection port. The structure is shown in Figure 1.

On this basis, it is a large visual landscape design platform for the hardware foundation.

4. Software Design

4.1. Basic Data Conversion

4.1.1. Terrain Data Acquisition. The realization of landscape design is based on a full understanding of the original conditions of the design environment. Therefore, a digital terrain

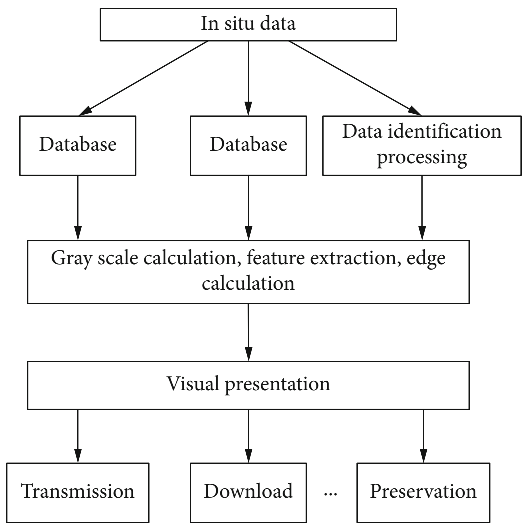

Figure 1: Hardware architecture of a large-scale visual landscape design platform.

model is established to collect terrain data. At present, there are three methods of data acquisition commonly used in practice: topographic data obtained from aerial photographs by aerial survey instruments, topographic data input from existing topographic maps by digitized instruments, and topographic data obtained from field observations by electronic theodolite which can record survey data and total station tachometric survey instruments. The data acquired by aerial survey can be used to observe the shape of the surface directly, and the distribution and density of the topographic points can be controlled freely and conveniently. Especially with the expansion of the application of aerial survey in highway testing, most of the large-scale topographic maps are obtained by aerial survey, which is becoming more and more popular. Another advantage of aerial survey data acquisition is that the analytic plotter used in aerial survey can record the map information without the need of reacquisition for the establishment of the digital ground model. Because the distribution and density of points are controlled randomly, it is suitable for the digital ground model based on TIN triangulation net, so the data source of terrain modeling is also collected by aerial survey.

4.1.2. Terrain Data Preprocessing. Because of the high density and large number of original terrain data points, it is necessary to preprocess the scattered terrain data, simplify the scattered terrain data, and correct the errors and singular points, which can not only ensure the normal simulation of terrain but also improve the efficiency of data retrieval and interpolation and reduce the consumption of system resources. When simplifying the data, the system adopts LOD, that is, deleting the noncharacteristic points of the terrain, adaptively reducing the complexity of the terrain scene, reducing the redundancy of the system data, and increasing the frame rate of the system. LOD technology can solve the contradiction between the massive terrain data processing and the limited rendering ability of the system.

4.1.3. Construction of Delaunay Triangle Network. Among all the principles of irregular triangulation, the Delaunay triangulation network is proved to be optimal. Delaunay triangle is the accompanying graph of Voronoi graph. It is defined as follows: the Voronoi polygon with a common side is called the adjacent Voronoi polygon, and the triangle is called the Delaunay triangle which is connected with the correlative points sharing one side of the adjacent Voronoi polygon. The circumcircle center of the Delaunay triangle is a vertex of the Voronoi polygon associated with the triangle. The Voronoi triangle is an even graph of the Delaunay graph. Delaunay triangle network has the characteristics of closeness, optimality, regularity, and uniqueness, so it has a great practical value. Therefore, the Delaunay triangle network has become the most commonly used DTM representation.

How to divide a scattered point set into triangular meshes is the triangulation problem of scattered point set, that is, the triangulation problem of Delaunay triangulation. According to the process of triangulation, this paper adopts the transverse expansion algorithm of Delaunay triangulation. Sort the discrete points by a coordinate value, then sweep a line parallel to the coordinate axis through the plane of the point set, stop at the so-called event point, and handle each event by adding a triangle until the end. This algorithm requires little memory, but it needs to update the convex hull of the triangle when adding triangle events. When the triangle network is large enough, it is also not conducive to triangle network construction. So, after considering the advantages and disadvantages of each algorithm, this system puts forward Delaunay's algorithm of dividing transverse expansion, that is, dividing a certain set of points reasonably by using the dividing algorithm, and then using the transverse expansion algorithm in the set of points to construct the triangle network, which can not only ensure that the triangle network does not exceed the scope of transverse expansion algorithm but also reduce memory consumption.

4.2. Establishment and Visualization of the Landscape Models

4.2.1. Hierarchical Landscape Data. The landscape model is a virtual simulation of real landscape in the computer world. From the composition of the terrain structure itself, it is divided into base surface, central partition, hard shoulder, earth shoulder, side ditch, embankment, cutting, slope, etc., in addition to structures (such as bridges and tunnels) and traffic safety ancillary facilities model (such as retaining wall, fence, and signs). Because of the complexity and diversity of the models, the landscape model will be constructed by the method of split-combination in order to adapt to the flexible design structure of modern landscape and low-carbon design concept. Grasshopper is used to realize the construction of the design. Grasshopper with its own simple computer editing function, that is, we often say the battery map, combined with the designer's thinking, through the wired way to connect the various different calculators, the operation of the appropriate results. At the same time, it can be combined into a new arithmetic, showing the strong "vitality" of Grasshopper. Secondly, the model graphical algorithm is used to automatically calculate the input data and program, and the corresponding model is constructed. Instead of the traditional manual drawing, it can control the data and program and change the external shape of the model. In this paper, we use Grasshopper to transform the design data by "tree" data logic. The "one-to-one correspondence" between data is constructed. Among them, tree data is divided into primary data, secondary data, and tertiary data. Each level of data corresponding to the results is not the same and is the order of point, line, and surface model generation. The primary data is mainly used to generate the most basic shapes of deformable objects, which can be lines, planes, and bodies, connected by a single curve. When designed as a plane, the system first creates three points of different coordinates, then joins them into a closed curve, and finally lofts to form a surface. In the whole process of the formation of points, the formation of lines and the formation of the surface are independent of the body, and they are connected by a single line. The secondary data is formed on the basis of the primary data. According to the generated plane, the process data level of the lofting block formed by copying a plurality of figures isometric along the Z-axis will be raised to a secondary data level. The main performance is the data connection with the hyperbola connection. Process is the result of the operation of each item of primary data and secondary data separately. The tertiary data is formed on the basis of the tertiary data. The tertiary data is also called "tree data." The data form will continue to accumulate. The data is like the bifurcation of tree branches, so it is called "tree data." The main manifestation is that the curve connecting the calculator becomes a hollow dotted line. In the process of transforming the two-level data into tree data, a tree data transforming calculator is added in the final process of operation to promote the data to one level. Based on this, the visualization of design is realized.

4.2.2. Discrete Elevation Processing of Image Data. In order to improve the effect of visualization in the future, this paper introduces discrete elevation calculation in the first stage of data operation to ensure that the digital platform system of landscape designed in this paper can get high-definition landscape images, and the discrete elevation calculation method adopts the principle of inverse distance weight-height interpolation calculation to realize image discrete elevation calculation. First, the data needs to be "inverse distance weight" calculation.

$$W_i = \frac{h_i}{\sum_{i=1}^{n} h_i}, \tag{1}$$

$$Z = \frac{\sum_{i=1}^{n} (1/q) z_i}{\sum_{i=1}^{n} (1-p)/q_i}, \tag{2}$$

where W_i represents the stability of the weight contained in the collected data, h_i represents the pixel resolution of the data, q represents the inverse coefficient, z_i is the visual chromatic aberration contained in the landscape, and Z represents the enthalpy difference in the process of calculating the inverse weight. Through Equation (1), Equation (2) can be collected as landscape data "coding," so as to facilitate the high-order discrete calculation. The calculation formula for data dispersion processing is as follows:

$$W_i = \frac{\left[\left(R - h^{-p}{}_i\right)/Rh\right]}{\sum_{i=1}^{n}\left[\left(R - h^{-p}{}_i\right)/Rh\right]^2}, \tag{3}$$

where $h^{-p}{}_i$ represents the phase difference between the discrete-time data and i and R represents the discrete-time difference between functions maximized to weights. The introduction of discrete elevation calculation is actually to set the pixel weight of the image and to program the disordered program by a discrete method. The procedure is as follows.

$$T_t = \begin{bmatrix} 1 & 0 & 0 & x_2 - x_1 \\ 0 & 1 & 0 & y_2 - y_1 \\ 0 & 0 & 1 & z_2 - z_1 \\ 0 & 0 & 0 & 0 \end{bmatrix}, \tag{4}$$

where T_t is the ordered data, and $x_2 y_2 z_2$ and $x_2 y_2 z_2$ are the 3D information of any two collection points. The landscape image which is calculated by discrete elevation has high stability, and even if there is some data disturbance, it will be eliminated quickly. The discrete-processed data can keep a certain difference control to avoid the frequency hopping caused by the visual chromatic aberration. The biggest phenomenon of frequency hopping is image sloshing. Although part of the reasons is eliminated by calculation, the probability of image sloshing has not been fundamentally solved.

4.2.3. Design Edge Correlation Seed Point Matching Optimization. In order to ensure the sharpness of the design image, the edge correlation is optimized according to the reason for the image shaking. The stability of the positive edge operator can be improved by the optimized edge correlation performance.

Assuming M is the gray level of the edge image, you can get a matrix sequence that sets the gray level of the edge

$$M = \begin{pmatrix} \dfrac{\partial^2 P}{\partial x^2}\vec{N} & \dfrac{\partial^2 P}{\partial x \partial y}\vec{N} \\ \dfrac{\partial^2 P}{\partial x \partial y}\vec{N} & \dfrac{\partial^2 P}{\partial y^2}\vec{N} \end{pmatrix}, \tag{5}$$

where P represents the color difference of gray scale and $\partial^2 P/\partial x \partial y$ represents the weights of edge correlation.

The edge data is as follows:

$$M' = \begin{pmatrix} L_{xx}(x, y, \sigma)\vec{N} & L_{xy}(x, y, \sigma)\vec{N} \\ L_{xy}(x, y, \sigma)\vec{N} & L_{yy}(x, y, \sigma)\vec{N} \end{pmatrix}, \tag{6}$$

where L_{xy} represents the pixel, point distance, and phase distance of the process, and x, y, σ represents the data dominance. The stability of edge can be guaranteed by edge operator, which is arranged according to Xining matrix, and the formula is as follows:

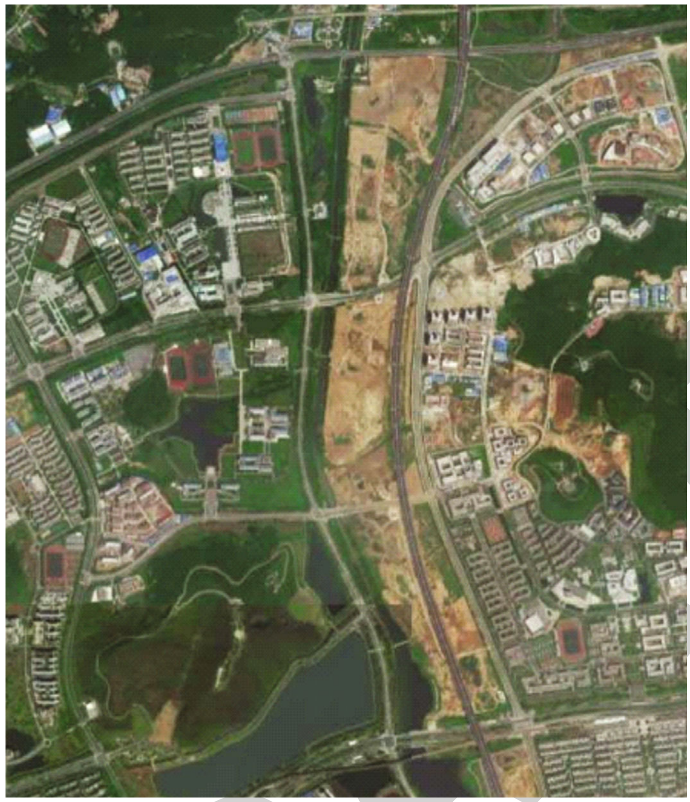

Figure 2: Panoramic view of design landscape river.

$$P = P_0^n = \begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}. \tag{7}$$

According to Equation (7), the edge operator is effectively edited to obtain the gray gradient of the image.

$$B_x = C_0 \oplus P_0^n = C_0 \begin{pmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \\ a_{31} & a_{32} & a_{33} \end{pmatrix}, \tag{8}$$

where B_x represents the gray gradient of the design image, C_0 represents the basic gray value, and $\begin{pmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \\ a_{31} & a_{32} & a_{33} \end{pmatrix}$ represents the parameter composition of the design image. The edge operator and grayscale gradient of image data are stabilized by edge correlation, which ensures the edge localization of image and greatly stabilizes the image. Finally, the edge stability of image is increased by the following formula:

$$X_i = a(X_{i-1} - X_i) + X_{i+1}, \tag{9}$$

where X_{i-1}, X_i, X_{i+1} is the three neighboring pixels in landscape design. Based on that, we add the rhythm and we get the following:

$$X_i = aX_{i-1} - X_i X_{i+1} + cX_{i+1}. \tag{10}$$

In formula AA, the c represents the rhythm of the image.

Through the editing of scale and image data object, the stability of data is achieved.

5. Experimental Test of a Visual Landscape Design Platform

This chapter mainly carries on the experimental design test to the landscape design platform. In this paper, the river flowing through a city is investigated on the spot, and it is taken as the experimental object. The aim of this experiment is to test the rationality of the research results in practice, so as to enhance the convincing of the paper.

5.1. Investigation, Analysis, and Research on Landscape Status. Designing landscape river is a tributary of the lower reaches of the Yangtze River, north-south trend, originated in the total length of 21.65 km river, and satellite images are shown in Figure 2.

With the expansion of the urban area, the experimental river has to undertake a greater diversion role. As a key river flowing through the city center, the experimental river has made great contributions to the improvement of environment, flood control, and climate of the whole city. At present, the municipal government has done a good job in the construction of the river's basic water conservancy hub, which can not only dynamically adjust the water level, namely, opening the sluice gate to discharge the flood during the

Table 1: Analysis of original topographic surface and elevation of hydrophilic landscape.

Numbering	Excavation area (m^2)	Excavation volume (m^3)	Reusable volume (m^3)	Packing area (m^2)	Fill volume (m^3)	Cumulative excavation area (m^2)	Cumulative reusable volume (m^3)	Cumulative fill volume (m^3)	Cumulative net volume (m^3)
6 + 215.000	131.56	0.00	0.00	7.44	0.00	0.00	0.00	0.00	0.00
6 + 300.000	239.22	24212.47	24212.47	11.73	692.30	24212.47	24212.47	692.30	23520.03
6 + 400.000	24.53	35337.20	35337.20	118.26	5509.23	35337.20	35337.20	2261.30	2362.02
6 + 500.000	247.32	35992.04	35992.04	0.00	10.30	35992.04	35992.04	12031.69	11053.69

Table 2: Design parameters.

Name	Coefficient of looseness	Compaction dilution	Two-dimensional area	Three-dimensional area
Design surface	1.260	0.920	20249.30	75130.3

Figure 3: Hydrophilic landscape design results.

summer flood season, but also begin to pump the water from the nearby Yangtze River once entering the dry season, so as to make the water level rise reasonably and finally reach a proper water level. The geographical location of the experimental river makes it necessary to contribute to the city's flood control, environmental improvement, and climate improvement. It is also worth mentioning that it promotes the city's economic development to a certain extent. The main contents of river emergency project are river dredging, new estuary sluice station, embankment reinforcement, and supporting building demolition and reconstruction. Channel project scale is as follows: river bottom elevation: 2.5 m, estuary width: not less than 66 m, slope ratio: 1 : 2.5, and landscape platform: 8.5 m upstream elevation and 2.5 m wide platform. The designed discharge of Hekou Gate Station is 381 m^3/s, which corresponds to the net width of gate hole of 30 m. Estuary pumping station scale is 15 m^3/s.

5.2. Experimental Landscape Design. In the course of harnessing the experimental river, we can clearly show the delicate relationship between the site and the designed structure by collecting the complete basic information, introducing the terrain coordinate points into the system, and setting up the site model, so as to accurately verify whether the design elevation or size of the river section meets the actual situation on the site. Cooperative working method is used to establish working set to realize the mutual communication and information sharing among specialties. Create project plans through engineering management software such as Microsoft Project and import them into the Navisworks built-in program TimeLiner to control the overall design process and to be able to view the status of the design at any time.

5.2.1. Design of Hydrophilic Facilities. Taking into account the river resources in the course of human life plays economic, cultural, and environmental functions and multiple roles. With the rapid development of urbanization and the increase of leisure demand, the change of the function of urban water system and the reuse of water bank space have been paid more and more attention. Water-affinity facilities,

Table 3: Analysis of original topographic surface and elevation of soft landscape.

Numbering	Excavation area (m^2)	Excavation volume (m^3)	Reusable volume (m^3)	Packing area (m^2)	Fill volume (m^3)	Cumulative excavation area (m^2)	Cumulative reusable volume (m^3)	Cumulative fill volume (m^3)	Cumulative net volume (m^3)
7 + 215.000	16.23	0.00	2.96	201.20	0.00	0.00	0.00	0.00	163.24
7 + 300.000	11288.30	13.96	12.69	118.30	136.24	1128.30	1254.36	4561.2	1222.60
7 + 400.000	12642.03	226.01	127.00	642.03	5362.00	1262.03	124.01	2267.39	1263.30
7 + 500.000	12368.01	126.27	1642.02	12368.01	12.62	12368.01	2267.36	120.36	14523.00

Table 4: Design parameters.

Name	Coefficient of looseness	Compaction dilution	Two-dimensional area	Three-dimensional area
Design surface	1.300	0.850	22924.93	753251.00

Figure 4: Soft landscape design results.

like bulkhead platforms, are an integral part of the landscape design of river regulation in Jiuxiang, which satisfies people's ornamental. Hydrophilic facilities are divided into hydrophilic trestle, hydrophilic platform, hydrophilic steps, and hydrophilic lawn.

5.2.2. Soft Landscape Design. Soft landscape is very common in our daily life, in the park, campus, roadside usually see a kind of plant is a soft landscape. It appears widely in our field of vision, mainly not only because it has a high ornamental value but also for people in summer to avoid the sun's exposure to provide a good place. In addition, it also has an important role in preventing soil erosion, beautifying the environment. Soft landscapes include trees, flowers, and grasslands. Waterside plant configuration: this area is a transitional zone between water and land or marsh, with water depth below 0.3 m. The arrangement of plants along the water's edge pays attention to artistic composition, and plants are arranged at the water's edge in the form of patches, dots, etc. These plants will be reflected in the water due to sunlight, enriching the water's surface layers and being very wild. Plant disposition in shallow water area: the water depth is 0.3~0.9 m in this area. Plant disposition is mainly composed of tall water and floating plants with broad leaves, which are used to construct the community landscape of aquatic plants. However, the disposition shall be coordinated with the proportion of water surface size and the vision of surrounding landscape, and congestion shall be avoided. Deep water plant configuration: the depth is 0.9~2.5 m, and plant configuration mainly considers the role of wetland sewage purification and self-purification capacity, often submerged plants plus some floating plant configuration, while ensuring the ecology, to create a quiet, deep natural atmosphere.

5.3. Achievements of a Design Platform in Experimental Landscape Design

5.3.1. Achievements of Waterborne Landscape Design. The original terrain surface and elevation analysis of hydrophilic landscape are shown in Table 1.

The design parameters are shown in Table 2.

The results of hydrophilic landscape design are shown in Figure 3.

5.3.2. Soft Landscape Design. The original topographic surface and elevation analysis of soft landscape are shown in Table 3.

The design parameters are shown in Table 4.

The results of soft landscape design are shown in Figure 4.

From this, we can see that the platform designed in this paper can achieve a clear performance of landscape design.

6. Conclusion

Digital technology is a complex and changeable computer technology which has changed the way of human life. It has gradually replaced many jobs and created new job opportunities. With the development of digital technology, its role in the design is more and more important. At the same time, the concept, content, and method of landscape design have put forward new requirements. The core of digital design is to realize the generation, development, control, and optimization of design by setting calculation rules and parameters, which improves the efficiency and accuracy of design. With the continuous introduction of visualization technology, the contemporary landscape design works have remarkable interactivity, experience, and innovation. This change is not only limited to its artistic form but also has great significance in making the audience more directly or indirectly relate to and resonate with the works by means of interaction, which is more conducive to the expression of the inner feelings of the works and establishes an effective connecting mechanism between the author and the audience.

Data Availability

The data used to support the findings of this study are included within the article.

Conflicts of Interest

The author declares that there are no conflicts of interest.

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