#### **PAPER • OPEN ACCESS**

# The application and value of virtual animation in Jinzhai revolutionary site

To cite this article: Gang Liu and Xiaocheng Zhou 2017 IOP Conf. Ser.: Earth Environ. Sci. 61 012155

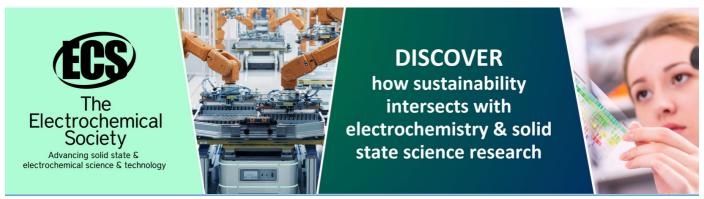
View the article online for updates and enhancements.

# You may also like

- Multi-scale data visualization for computational astrophysics and climate dynamics at Oak Ridge National Laboratory Sean Ahern, Jamison R Daniel, Jinzhu
- Gao et al.
- Research on the Design of Crescent Ribbed Steel Bifurcation Pipe of High Head Hydropower Station- Take Jinzhan River -I Hydropower Station as an Example

Shaohong Pan, Yunen Wu and Jiajia Ding

- Analysis of sediment variation trend and genesis in Jinzhou Port Sea area Xu Jing, Wang Nan, Shou Youping et al.



doi:10.1088/1755-1315/61/1/012155

# The application and value of virtual animation in Jinzhai revolutionary site

#### Gang Liu, Xiaocheng Zhou

College of Animation, Anhui Xinhua University, Hefei, 230088, china 729334333@qq.com, zhou xiao cheng@163.com

**Abstract**. A virtual interactive technology in Jinzhai revolutionary site virtual interactive animation, with "Internet plus Jinzhai revolutionary site virtual animation" spread display, to achieve a variety of ways to carry forward the patriotic education, Jinzhai red culture, but also promote benign circulation of red tourism and economic development of Jinzhai revolutionary site protection investment group.

#### 1. Jinzhai revolutionary site introduction

Anhui city of Lu'an Province, Dabie Mountain is a national AAAA level Geological Park, located in the central region of China Anhui Province, Hubei Province, Henan Province, at the junction of three provinces, East Nanjing, west of Wuhan, is located in the middle position of Nanjing and Wuhan two city, with its unique geographical environment and geographical barrier, thus highlights of Dabie Mountain has an important military value of the Republic of China, the capital city of Nanjing and the central city of Wuhan, and Jinzhai County in the middle area of the Dabie Mountains Revolutionary Base, has a large number of revolutionary sites according to the. In 1924, Jiang Guangci, a famous revolutionary pioneer in our country, returned to his hometown from the Soviet Union to carry out the development of Party members on the basis of the local situation, and the Communist Party of China (CPC) was established in the area of swallow River and Nanxi. The 1929 outbreak of the famous "Lixia uprising and 6 suddenly uprise", then set up Chinese Red Army thirty-second division thirty-third division, as Chinese Hubei, Henan, Anhui open communist revolutionary base established immortal meritorious service [1]. In 1947, Liu Baicheng, led by the army of thousands of miles into the Dabie Mountains, the liberation of the whole territory, after this place name changed to Jinzhai county.

Jinzhai county is located in Anhui city of Lu'an Province, and adjacent to Henan, Hubei two provinces, in Heaven Village, Mazongling, Jingangtai, swallow River Canyon, Xiang Shan Temple, Lenin primary school site, Lixia uprising site such as nature reserves and cultural relics protection units. Is the largest county in Anhui province the largest area of red culture tourism resources, since ancient times is the points of battle, military transportation is extremely important. Jinzhai County revolutionary site reflects the magic of Mao Zedong thought to guide the rural revolutionary Chinese surrounding the city to victory and took the lead in the lead in establishing the party organization, party organization, led by agricultural workers and soldiers transported an armed uprising, to the countryside to encircle the city of victory, the establishment of democratic regime. Jinzhai County revolutionary site is treasure of Chinese revolutionary historical heritage, is the best place to carry out the education of patriotism and revolutionary tradition, every year attracts numerous audiences around the country to accept the revolutionary patriotic education, Burma revolutionary martyrs [2].

Content from this work may be used under the terms of the Creative Commons Attribution 3.0 licence. Any further distribution of this work must maintain attribution to the author(s) and the title of the work, journal citation and DOI.

IOP Conf. Series: Earth and Environmental Science 61 (2017) 012155

doi:10.1088/1755-1315/61/1/012155

Our party and state leaders have always attached importance to the protection of cultural heritage, and has promulgated a series of laws and regulations for the protection of cultural relics, a large number of important cultural heritage value of the revolution has get better protection to sites and ancient buildings. In the late twentieth Century, China has accelerated the pace of the world cultural heritage declaration, many revolutionary base sites, cultural relics, ancient buildings and cities are listed or will be included in the world cultural heritage [3].

#### 2. The application of virtual animation in Jinzhai revolutionary site roaming display

Virtual animation is the form of animation in the virtual reality, which is based on the concept of virtual reality and animation. Is the computer as the carrier, installation and operation of 3D animation software in the computer, based on the establishment of a virtual three-dimensional space, then according to the size of the object shape structure, the proportion of the construction of virtual scene model, combined with the predetermined trajectory angle setting model, according to the virtual camera movement and other animation parameters assigned on the model material and set the lights to simulate the visual, auditory, tactile and other sensory, as general view personally on the scene in the virtual 3D space of the people and things [1]. Virtual animation is widely used in many fields such as education, medicine, military, games, entertainment and so on. The development of the existing animation production technology in Jinzhai revolutionary site virtual roaming animation, through the original appearance of the site of reduction and revolutionary history allusions are well represented in the form of animation 3D animation modeling technology, and with the help of the audience for animated films, to meet the audience's visual needs.

# 2.1. Application of virtual animation

The application of virtual animation technology in Jinzhai revolutionary site roaming display, can recover Jinzhai revolutionary site, combining with the audience favorite anime, is intuitive and interactive.

Intuitive, real scene simulation model using 1:1 proportional to build 3D modeling technology, combined with the animation of the map can be the performance of the real scene, application plus music, sound effects and effects of the 360 degree performance of Jinzhai revolutionary site three-dimensional sense of space, very real drawn on the inside and outside scenery, increasing its ornamental.

Interactivity is one of the most important aspects of modern virtual animation. The audience can be changed from passive viewing to active appreciation. Is no longer in the body to watch, but into the scene, there is an immersive tour.

## 2.2. Jinzhai mining revolutionary connotation

Jinzhai revolutionary site an important position in the military area, the occurrence of some major revolutionary battle, Jinzhai revolutionary site layout and relevance and touching stories capable of evoking praises and tears full comb, so that these elements and modern animation art combined with visual effects and animation art and good 3D animation technology, virtual exhibition add glory to the Jinzhai revolutionary site virtual roaming animation effect, greatly show the cultural connotation of Jinzhai revolutionary site.

### 3. The application of virtual animation in Jinzhai revolutionary site roaming display

Virtual animation in the application value of Jinzhai revolutionary site With the acceleration of the process of information, people through computers, mobile phones, tablet PCs and other mobile communication devices to connect to the Internet, you can carry out activities in all aspects of resources. Jinzhai is a revolutionary site patriotic education, to commemorate the martyrs and the local tourism resources, if can "Internet plus revolutionary use of 3D animation technology and interactive technology of virtual roaming display", using the Internet can more show, let more people familiar with Jinzhai revolutionary site, has important significance.

IOP Conf. Series: Earth and Environmental Science **61** (2017) 012155

doi:10.1088/1755-1315/61/1/012155

# 3.1. Innovation of patriotism education mode

The traditional patriotism education is the form of education groups to the scene to watch, hear, feel, etc.. If the group of minors by the school or organization to patriotism education base, it is necessary to use financial resources, material resources, human resources and to prevent the occurrence of various security incidents. Jinzhai revolutionary site culture, using Internet plus virtual animation display mode in the era of rapid development of information technology, carry forward the spirit of martyrs. Change the distance between the region is effectively reduced due to and from the patriotic education base cost of manpower, financial and material resources; changed due to a large number of people into the base, causing the destruction of the revolutionary site activities, through the existing media can achieve real-time education needs.

#### 3.2. Jinzhai red cultural tourism

Anhui provincial government issued the implementation of the Dabie old revolutionary base areas the revitalization and development planning and implementation plan (hereinafter referred to as the "plan"). Planning the development goal of our province Dabie mountain old revolutionary base areas during 13th Five-Year that promote Wanxi traditional villages in the overall protection and utilization, put the Dabie Mountain in Jinzhai County of Anhui developed to become well-known red tourist attractions and important cultural, ecological and leisure tourism destination. Jinzhai group is a revolutionary site in the Dabie Mountains, as the development and promotion of local red culture tourism resources, promoting local culture connotation construction and tourism brand effect, thus driving the rapid development of Dabie Mountain area economy, improve the local fiscal revenue and the improvement of living standards.

The realization of Jinzhai revolutionary site roaming virtual animation project, hand pull the Jinzhai tourism economic development and expand the influence of Jinzhai, increasing the local finance income; on the other hand to break the geographical restrictions, to achieve inter city, provincial and even cross-border spread, let more people familiar with Jinzhai Red Culture Revolution site.

#### 3.3. Inherited the spirit of revolutionary martyrs

Anhui Jinzhai revolutionary site has written numerous heroes, such as Liu Baicheng, Deng Xiaoping and other old revolutionary according to the CPC Central Committee's strategic deployment requirements, led by Shanxi and Hebei, Shandong and Henan and other army from Dabie Mountain, opened China people's war of liberation from strategic defense to strategic offensive prelude. In the Dabie Mountains as the center of the Jianghuai region, has wiped out 190 thousand people, according to the Central Plains to the re-establishment of the people's war of liberation, reversing the situation, in order to win the victory, achievements of the immortal exploits [1]; the Hubei Henan Anhui district will be set up in the Dabie Mountains, and to carry out the training of cadres, made one after another the great victory of the revolutionary struggle leading Henan area. These historical events through the virtual animation rendering technology, show in the world's eyes, the revolutionary deeds further inherit and carry forward the construction of spiritual civilization, is the indispensable resources for Chinese people, let the world know the spirit of martyrs and suggest that people learn from history, make people not easily won the peace.

# 4. Summary

Jinzhai County revolutionary site group because of various reasons by different degree of damage, some valuable cultural resources or even disappear very painful, thinking about the contemporary cultural workers, cultural workers, scholars and other groups, how to break the industry integration and development space. It is of great significance to apply the new technology to the protection and innovation, inheritance and development of traditional culture. Application of 3D animation technology, virtual reality technology and Jinzhai revolutionary site group combined with the development of virtual animation Jinzhai revolutionary site group roaming works, the characters, story, site restoration, environmental revolution landscape, every detail is not missing, are all displayed in front of. The use of the Internet virtual animation Jinzhai revolutionary site roaming works uploaded

IOP Conf. Series: Earth and Environmental Science 61 (2017) 012155

doi:10.1088/1755-1315/61/1/012155

to the network platform for more people to visit and study. In order to change the traditional school youth patriotism education form, inheritance martyrs will; can not only enhance the cultural tourism resources in Jinzhai propaganda, carry forward the revolutionary spirit; and then promote the development of local economy, thus protecting the revolution in Jinzhai to re-enter the site; the industry to achieve cross fusion for innovation the development of.

#### References

- [1] Wu Yahui. Creation of 3D animation of product [J]. ship engineering, 2015 (2): 206-211.
- [2] ho Hui. [J]. plays a important role of popular literature on "Jinzhai revolutionary site" in Henan area, 2015 (22): 171-171.
- [3] Zhang Jiachen, Zhang Rong. Study on the protection and utilization of the existing buildings and historic buildings [C]. planning and Innovation: Proceedings of the 2014 annual meeting of Chinese urban planning, 2014 (22): 67-72.
- [4] Excellent young talents in colleges and universities in anhui province support plan key projects (gxyqZD2016387)
- [5] Colleges and universities in anhui province (SK2015A673) as a key project of humanities and social science research; Colleges and universities in anhui province the humanities and social sciences research project (SK2013B324) generally
- [6] Anhui xinhua college humanities and social science research project (2015 rw003)
- [7] Research on the application of virtual 3D animation technology in the design of human machine interface. (Item number: 2016td004)