Virtual Reality

----A new educational means of science center

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China Science and Technology Museum

2017.11.16

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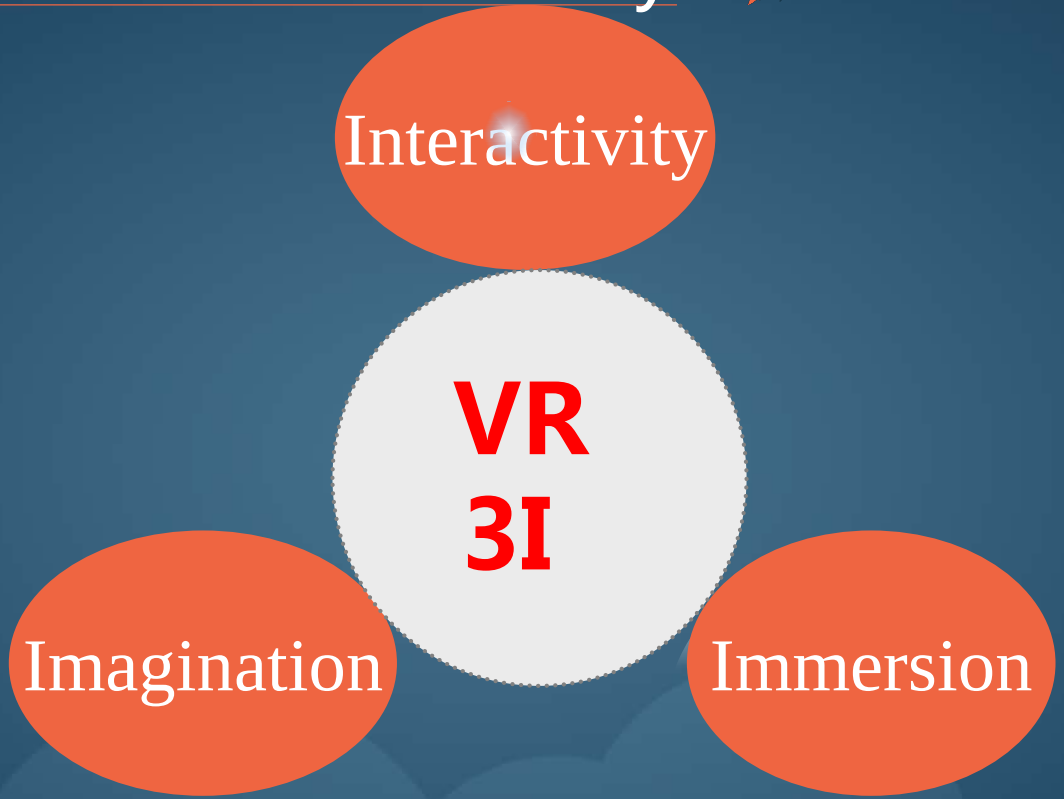
1 **What--**what is virtual reality ?

2 **Why--**why we use VR in science center?

3 **How--**How to do in China Science and Technology Museum?

1 What--what is virtual reality ?



2 Why--why we use VR in science center?

Situated cognition & Situated learning (Social Constructivism)

authentic tasks

Learning in science center

Virtual Reality

Immersion simulation of the object

2 Why--why we use VR in science center?

Learning in science center

Virtual Reality

Inquiry learning

Interactivity

Imagination

2 Why--why we use VR in science center?

Big data

Which popular science forms do users pay most attention to?(Sort by heat index)

science experiment	virtual reality	science gift	Panoramic walkthrough	Network popular science	Digital Science Museum
69743020	29842391	1104860	61450	2270	400

Data time:2016.7.1-2017.6.30

2 Why--why we use VR in science center?

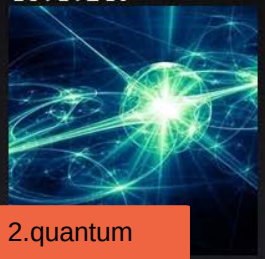
Big data

Subjects(Sort by heat index)

20400770

1.Biology

18717240

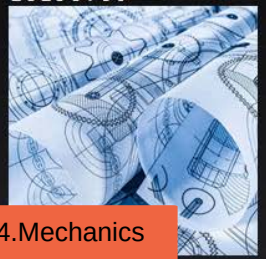


2.quantum

16238830

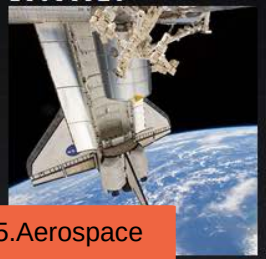
3.Astronomy

15195760



4.Mechanics

15036920

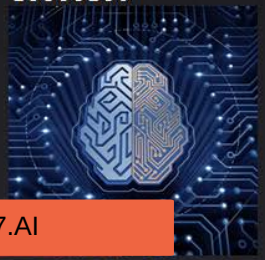


5.Aerospace

14604750

6.geology

13866160



7.AI

13198380

8..big data

12843830

9.Ancient science and technology

12247450

10.new materials

Data time:2016.7.1-2017.6.30

3How--How to do in CSTM?

中国科学技术馆
CHINA SCIENCE AND TECHNOLOGY MUSEUM

中国科学技术协会
China Association For Science and Technology

中国仿真学会
China Simulation Federation

2016

Start the construction of VR science ptoject. we collected VR projects for the whole society.

2017-2019

Spread the VR project to the whole country.

3 How--How to do in CSTM?

spend

50 million RMB

Item quantity

59

Subject category

8

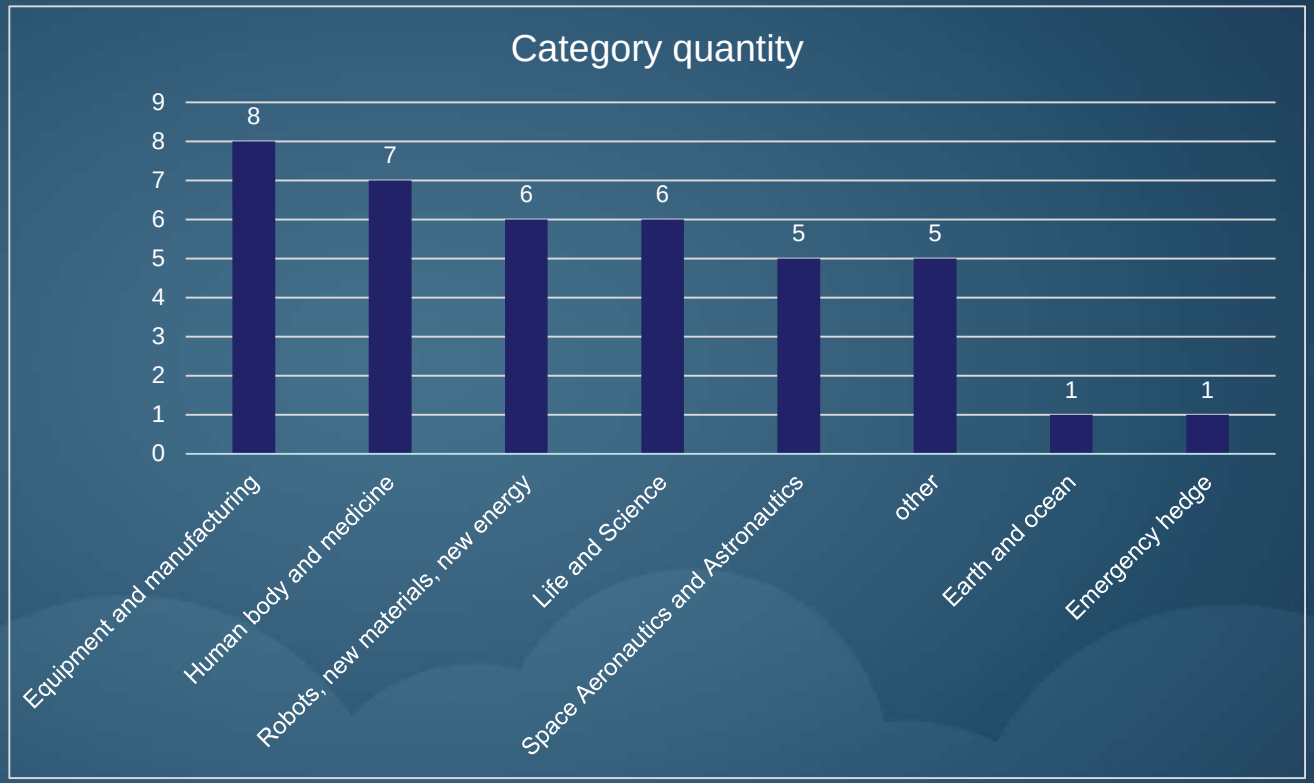
presentation form

3

3 How--How to do in CSTM?

59 → 39

- Scientific
- Interest
- Logic
- Creativity
- Visual effect



3 How--How to do in CSTM?

3 How--How to do in CSTM?

Equipment and manufactuing

Zheng He's voyages in the South Seas as far as Africa

Made by Chinese Academy of Sciences Institute of Oceanography

Experience the Pacific seabed scientific expedition

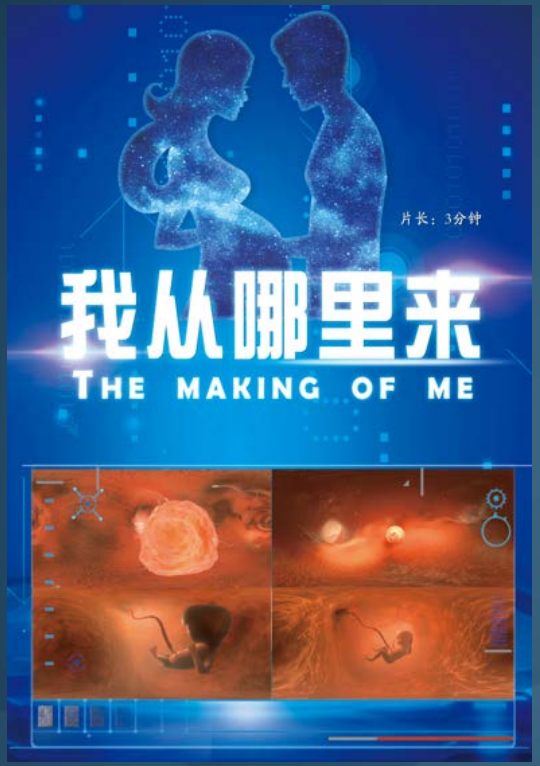
3 How--How to do in CSTM?

Equipment and manufactuing

Aircraft carrier allocation

Missile weapon

3 How--How to do in CSTM?



Where do I come from?

The growth and development of fetus in uterus

Human body and medicine

Genetic genes

Made by Tencent, one of the largest Internet Co in China

3 How--How to do in CSTM?

Life and Science

Dinosaur Extinction

Bee Kingdom

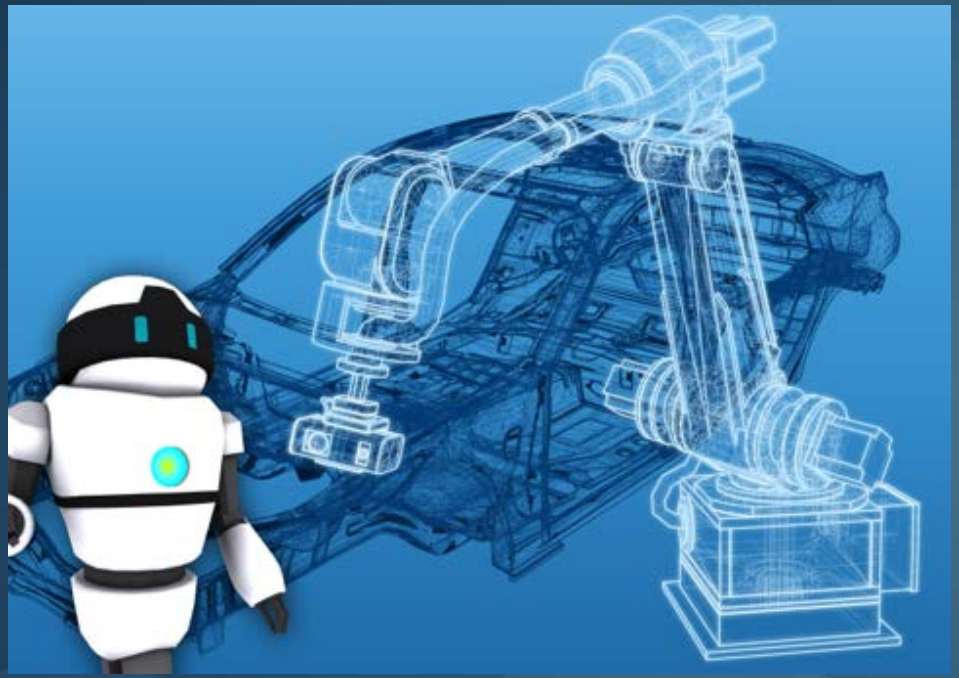
Experience a bee

Full view eyes return to the hive with direction.

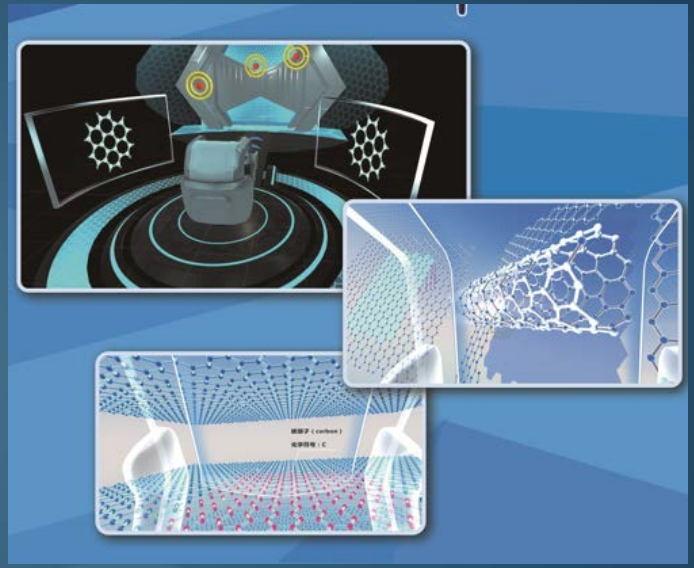
Honeycomb Structure

3 How--How to do in CSTM?

Robots, new energy, new materials



Robot production in an intelligent factory



Structure of graphene

3 How--How to do in CSTM?

Space Aeronautics and Astronautics

Roving Mars

Lunar simulation interaction

Rocket launching.Lunar rover

3 How--How to do in CSTM?

On-line VR

3 How--How to do in CSTM?

3 How--How to do in CSTM?

Q: What science museums can apply for VR projects?

A:Any one of China's science and technology center.

you need

3 How--How to do in CSTM?

VR in CSTM

Aircraft carrier allocation

VR simulation platform-Drop bin

Lunar scientific investigation

3 How--How to do in CSTM?

walking on Mars

space walk

THANKS FOR WATCHING

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