Project Proposal - An Osteologist's Day

Title

Tentative: "An Osteologist's Day"

The Effect (Summary)

In this project, we will try to tell a story about a "super scanning machine" which can instantly scan the human body and then display the acquired structure out in 3D. It can display the data in various ways to show different human anatomy structure of interest, such as the skeleton or the muscles, without the clothes or skin, etc. It will behave like a CT or MRI machine with superior functions.

The two footages, real video scene, and virtual scene of human anatomy, will be matched and blended seamlessly.

1. The input

We will shoot a live scene featuring two actors. A trackable cuboid box will be used in the scene. The box will be marked with trackable dots or special color for the motion tracking. This box will represent the "super scanning machine".

The other input data is the pre-rendered skeleton model or muscle model, which will be used in post-production to create the final effect.

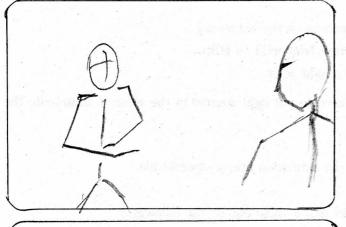
2. The output

We will output a video clip that tells the story. The two footage will be blended.

3. The layers

2 layers: the live shot and the computer generated virtual human organ.

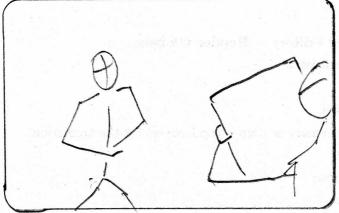
4. Storyline/storyboard



Patient -- Doctor, I am afraid I've broken my arm.. L

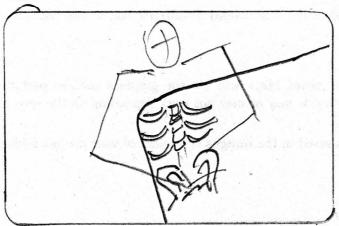
Doctor – Oh, let's have a look..

Medium Shot

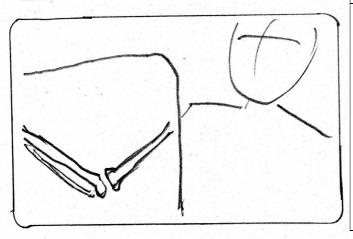


Dr. – Let me use this "**X-Frame**" to check you.

Over the Shoulder Shot



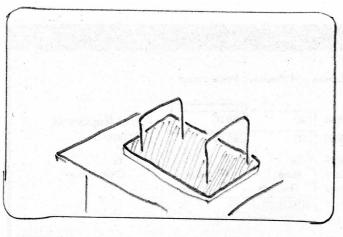
Doctor switch on and hold "X-Frame" towards patient. Patient skeleton appears on the screen.



Dr. – Close and stretch your arm please.. Hmm.. seems ok..

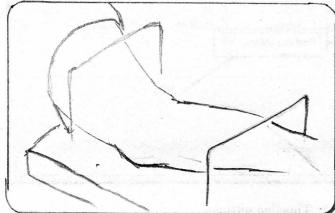
Put it in front of patient, arm bone appears. Move arm, bone moves accordingly.

Close up shot.



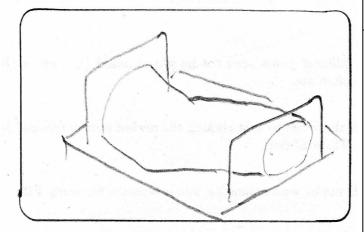
Dr. – Let's have a detailed study use this X-scanner.

Close up shot for the equipment.



Dr. – Please put your arm into it.

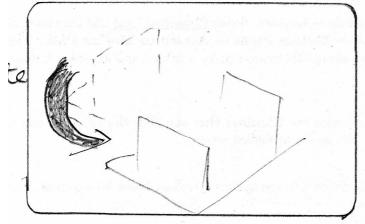
Press a button to scan.



Dr. – OK. Done.

Patient – So fast!

Virtual arm image appears in between the sensor frames.



Dr. rotate the plate, the image rotates accordingly.

5. Team members

Yang Guang Zhang Xi Zhou Yi Nan

6. Task allocation

Story board & script: Yang Guang, Zhang Xi, Zhou Yi Nan

Real video:

Shooting: Yang Guang, Zhang Xi, Zhou Yi Nan Actors: Yang Guang, Zhang Xi, Zhou Yi Nan Props: Yang Guang, Zhang Xi, Zhou Yi Nan

Virtual video: Yang Guang

Post product: Zhang Xi, Zhou Yi Nan

7. Timeline

Week 4: Project proposal. Submit proposal.

Week 5 -6: Video script and real scene shooting. Virtual scene preparation.

Week 7: Project report

Week 8-9: Footage editing and vision special effect creation.

Week 11: Post product and Project update

Week 12: Project Finalization

Week 13: Project presentation and demo