



## **Production Overview, Sound Design and Final Light/Render**

An overview of the process and pipeline for LION DANCE including live-action reference, schedules, budgets and crew

# 1. Production Overview



We recruited, budgeted for, time-managed and directed a global team of creatives (such as modelers, riggers, actors, composers and animators) to achieve our goals. **Our team spans 5 continents.**

#### LEGEND:

★ Tim & Zheng

● Modeling  
Character  
Environment  
Props

● Live Action  
Actors  
Photography  
Direction  
Assistants

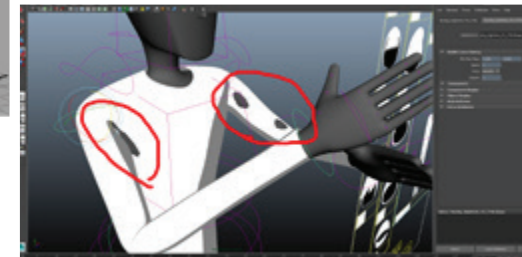
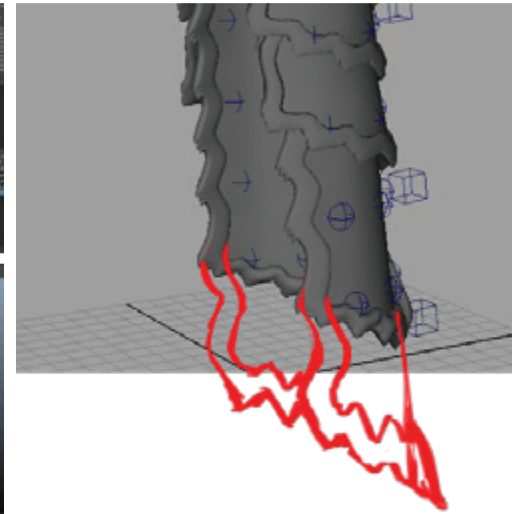
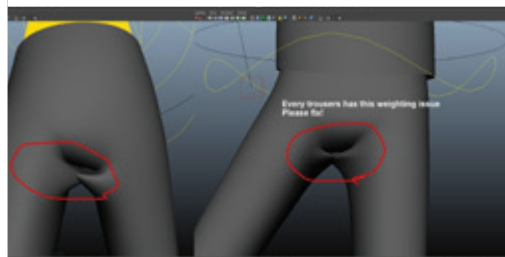
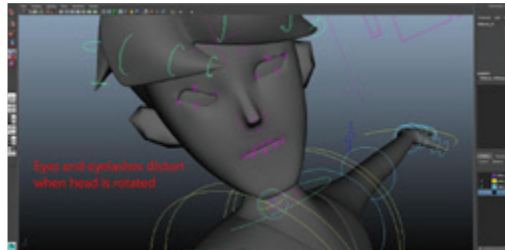
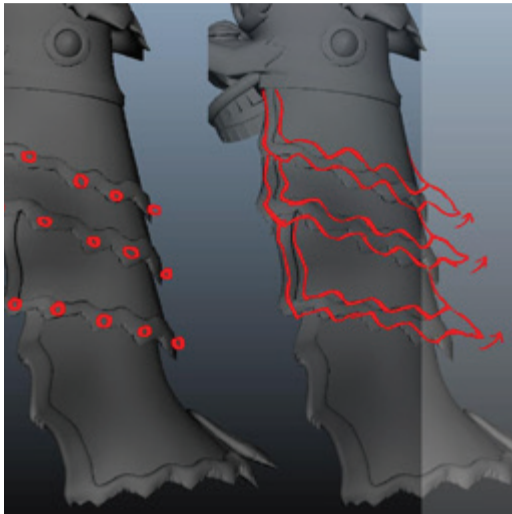
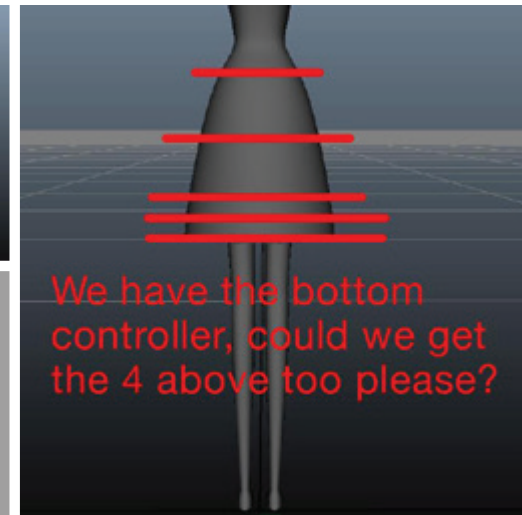
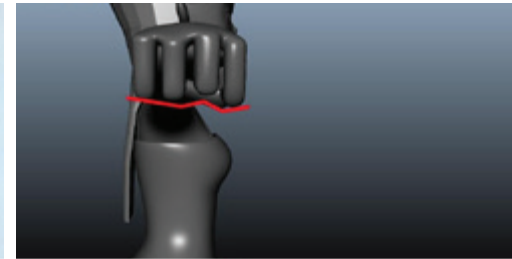
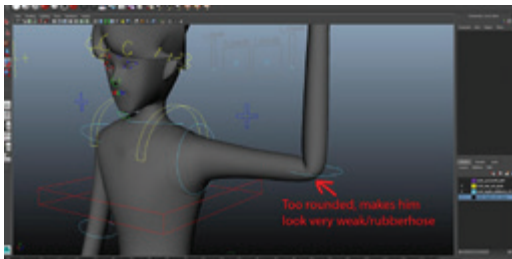
● Score  
Composer  
Musicians  
Assistants

● Rigging  
Character  
Lion Costume

● Animation  
CG Pre-Vis  
Character  
Camera  
Lighting  
Render  
Composit

● Sound  
Designer  
Mix

Breakdown of Production Crew by Geographical Location



Rigging and Modeling feedback was achieved through Skype meetings and a series of drawovers, created from rigorous testing of each asset



We shot live-action reference to help communicate the direction of each scene to our animation team



HERE: At the end of one of many long days!

We shot live-action reference to help communicate the direction of each scene to our animation team

Please don't bring Jian's arm across his body so much, when he runs.  
Please see drawover, for maximum that the arm should cross the body.

Also, please rotate the arm out a little so we're not seeing all the back of his hand (as in drawover).



When arm lifts,  
shoulder should lift too

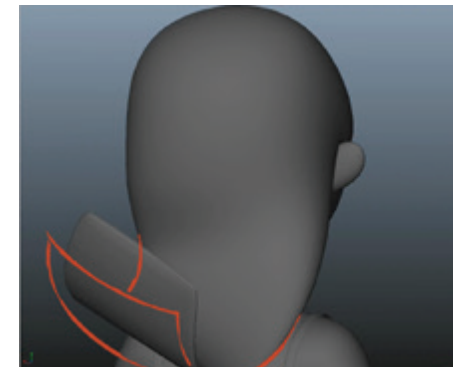
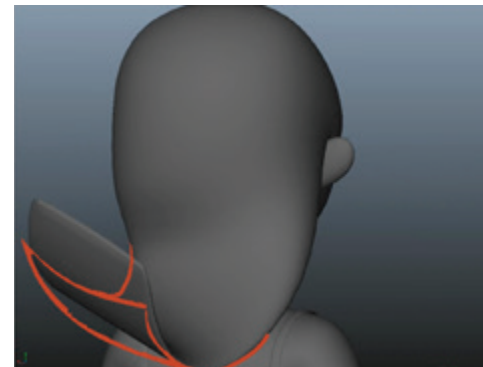
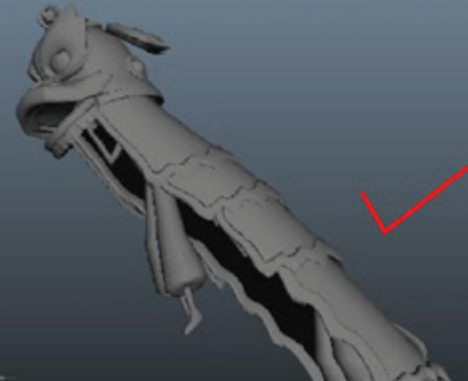
Please note the opposite directions  
for shoulder and waist, please push  
these for clarity.

So, when shoulders are:

Waist should be:

And vice versa.

We LOVE this stretch, as Jian leaps up first. Please do not change this!!  
BUT: Can the teammate jump higher too, as Jian falls down, to get a nice arc?  
(please try this for all jumps)



**THIS SPREAD:** Our animation team was global and so, as animation leads, we commissioned and directed scenes via Skype calls, notes and drawovers of each sequence to communicate in the best way possible. Our specially-shot live-action reference was a great resource for our animation commissions. A very small number of our many examples can be seen here.

Animation feedback was achieved through Skype meetings and a series of drawovers, typically through 2-5 passes before sign-off

|                        | FALL 2015 SEMESTER                        |                     |                                                                   |           |           |                                                                              |              |                   | SPRING 2016 SEMESTER |                                                                                                      |                  |                                                                        |                                                                                        |                                             |           |           |                                                                          |    |        |    |        |    |  |
|------------------------|-------------------------------------------|---------------------|-------------------------------------------------------------------|-----------|-----------|------------------------------------------------------------------------------|--------------|-------------------|----------------------|------------------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------|-----------|-----------|--------------------------------------------------------------------------|----|--------|----|--------|----|--|
|                        | SEPTEMBER                                 |                     | OCTOBER                                                           |           | NOVEMBER  |                                                                              | DECEMBER     |                   | JANUARY              |                                                                                                      | FEBRUARY         |                                                                        | MARCH                                                                                  |                                             | APRIL     |           | MAY                                                                      |    |        |    |        |    |  |
|                        | Sep 01-14                                 | Sep 15-30           | Oct 01-14                                                         | Oct 15-31 | Nov 01-14 | Nov 15-30                                                                    | Dec 01-14    | Dec 15-31         | Jan 01-14            | Jan 15-31                                                                                            | Feb 01-14        | Feb 15-29                                                              | Mar 01-14                                                                              | Mar 15-31                                   | Apr 01-14 | Apr 15-30 | May 01-07                                                                |    |        |    |        |    |  |
| Modeling               | All characters designs modeled and rigged |                     |                                                                   |           |           |                                                                              |              |                   |                      |                                                                                                      |                  |                                                                        |                                                                                        |                                             |           |           |                                                                          |    |        |    |        |    |  |
|                        | All environment designs modeled           |                     |                                                                   |           |           |                                                                              |              |                   |                      |                                                                                                      |                  |                                                                        |                                                                                        |                                             |           |           |                                                                          |    |        |    |        |    |  |
| Pre-vis                | Maya pre-vis layouts, cameras             |                     |                                                                   |           |           |                                                                              |              |                   |                      |                                                                                                      |                  |                                                                        |                                                                                        |                                             |           |           |                                                                          |    |        |    |        |    |  |
| Animation              |                                           |                     | Fully light, render, comp one scene as research for next semester |           |           | All animation is completed by animation team, and signed off by co-directors |              |                   |                      |                                                                                                      |                  | "Polish" by co-directors                                               |                                                                                        |                                             |           |           |                                                                          |    |        |    |        |    |  |
| Titles and credits     |                                           |                     |                                                                   |           |           |                                                                              |              |                   |                      | Front titles and end credits are designed and animated, signed off by co-directors                   |                  |                                                                        |                                                                                        |                                             |           |           |                                                                          |    |        |    |        |    |  |
| Lighting and Rendering |                                           |                     |                                                                   |           |           |                                                                              |              |                   |                      | Begin Lighting and Rendering Tests, Final Cameras and Process signed off for each scene of the film. |                  |                                                                        | Lighting and Rendering Completed                                                       |                                             |           |           |                                                                          |    |        |    |        |    |  |
| Sound Design           |                                           |                     |                                                                   |           |           |                                                                              |              |                   |                      |                                                                                                      |                  | Additional sound design is determined, commissioned and completed here |                                                                                        |                                             |           |           |                                                                          |    |        |    |        |    |  |
| Score                  |                                           | Composer interviews | Composer launch                                                   |           |           | Composer check-in                                                            |              | Composer check-in |                      | Composer check-in                                                                                    |                  | Composer check-in                                                      | Picture Lock submitted to Composer                                                     | Score is recorded, supplied to co-directors |           |           |                                                                          |    |        |    |        |    |  |
| Composit               |                                           |                     |                                                                   |           |           |                                                                              |              |                   |                      |                                                                                                      | PICTURE LOCK     |                                                                        | Final comps dropped into final timeline upon completion, based on agreed picture lock. |                                             |           |           | Score is added.                                                          |    |        |    |        |    |  |
| Completion             |                                           |                     |                                                                   |           |           |                                                                              |              |                   |                      |                                                                                                      |                  |                                                                        |                                                                                        |                                             |           |           | Final "polish", team sign off, delivery and thesis defence to committee. |    |        |    |        |    |  |
| Faculty meetings       | MP                                        | AJ                  | MP                                                                | AJ        | MP        | AJ                                                                           | MP           | AJ                | MP                   | AJ                                                                                                   | MP               | AJ                                                                     | MP                                                                                     | AJ                                          | MP        | AJ        | MP                                                                       | AJ | MP     | AJ | MP     | AJ |  |
|                        | CR, MN                                    |                     | CR, MN                                                            |           | CR, MN    |                                                                              | CR, MN       |                   | CR, MN               |                                                                                                      | CR, MN           |                                                                        | CR, MN                                                                                 |                                             | CR, MN    |           | CR, MN                                                                   |    | CR, MN |    | CR, MN |    |  |
|                        |                                           |                     | TS                                                                |           |           |                                                                              |              |                   | TS                   |                                                                                                      |                  |                                                                        | TS                                                                                     |                                             |           |           | TS                                                                       |    |        |    |        |    |  |
| Dates of interest      | Du's Birthday                             |                     |                                                                   |           |           |                                                                              |              |                   |                      |                                                                                                      | Zheng's Birthday | Tim's Birthday                                                         |                                                                                        |                                             |           |           |                                                                          |    |        |    |        |    |  |
|                        |                                           |                     |                                                                   |           | Halloween |                                                                              | Thanksgiving |                   |                      |                                                                                                      | Christmas and NY |                                                                        | Chinese NY                                                                             |                                             |           |           |                                                                          |    |        |    |        |    |  |

| WEEK                                    | SUNDAY                                                                                                                                                                                             | MONDAY | TUESDAY                                                                                                                                                                                                | WEDNESDAY                                                                                 | THURSDAY                                                               | FRIDAY | SATURDAY |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|--------|----------|
| 01 (Jan 03 - Jan 09)                    | 1. Supply designs for Fish Lantern, Dragon Lantern, Drum and Cymbals to Du for completion BEFORE semester begins (next week)                                                                       |        | 2. Supply final cameras to Warren/JoJo, with Mon Jan 25 as final deliverable deadline.<br>3. Commission posed background characters, with all crowd rigs (adults, teens and child; Quin, or Alan Chung |                                                                                           |                                                                        |        |          |
| 02 (Jan 10 - Jan 16)<br>SEMESTER BEGINS | 1. Use Playblasts (and Animatic art for outstanding cameras) to create a timeline of the whole animated film.                                                                                      |        |                                                                                                                                                                                                        | 2. Determine background models, characters, animations needed for scenes (based on edit). | 3. Creation of background elements, to complete each scene (no color). |        |          |
| 03 (Jan 17 - Jan 23)                    | 1. Continue creation of background elements, to complete each scene (no color).                                                                                                                    |        |                                                                                                                                                                                                        |                                                                                           |                                                                        |        |          |
| 04 (Jan 24 - Jan 30)                    | 1. Add final animations to timeline edit.<br>2. Determine remaining background elements (no color).                                                                                                |        | 3. Continue creation of background elements, to complete each scene (no color).                                                                                                                        |                                                                                           |                                                                        |        |          |
| 05 (Jan 31 - Feb 06)                    | 1. All background elements completed this week.<br>2. Add background elements to timeline edit, for continuity check/scene hook-up.<br>3. Once all is signed-off, coloring and lighting can begin. |        |                                                                                                                                                                                                        |                                                                                           |                                                                        |        |          |
| 06 (Feb 07 - Feb 13)                    | 1. Coloring and lighting of IMPORTANT scenes, where Ito has to understand this scene (includes lighting in eyes, for life).                                                                        |        |                                                                                                                                                                                                        |                                                                                           |                                                                        |        |          |
| 07 (Feb 14 - Feb 20)                    | 1. Coloring and lighting of IMPORTANT scenes, where Ito has to understand this scene (includes lighting in eyes, for life).                                                                        |        |                                                                                                                                                                                                        |                                                                                           |                                                                        |        |          |
| 08 (Feb 21 - Feb 27)                    | 1. Coloring and lighting of IMPORTANT scenes, where Ito has to understand this scene (includes lighting in eyes, for life).                                                                        |        |                                                                                                                                                                                                        |                                                                                           |                                                                        |        |          |
| 09 (Feb 28 - Mar 05)                    | 1. Add colored/fit scenes to timeline edit.<br>2. Final polish of timeline, add any edits/new colored/fit scenes<br><b>3. We are now PICTURE LOCKED</b>                                            |        |                                                                                                                                                                                                        | 4. Supply of PICTURE LOCK to Ito.                                                         | 5. Feedback from Ito?                                                  |        |          |
| 10 TBS                                  |                                                                                                                                                                                                    |        |                                                                                                                                                                                                        |                                                                                           |                                                                        |        |          |

| Discipline                | Cost (\$US)     |
|---------------------------|-----------------|
| Modeling                  | \$1,400         |
| Rigging                   | \$2,600         |
| Animation                 | \$5,000         |
| Sound/Score               | \$2,000         |
| <b>Total Project Cost</b> | <b>\$11,000</b> |

**TOP:** Original Production Schedule.

**LEFT:** Revised Jan-Feb 2016 schedule, to meet March 1st Picture Lock.

**ABOVE:** Approximate Overall Costs.

Early estimates of funding and scheduling breakdown, for production pipeline

## 2. Score and Sound Design



Our sound team was based in Tokyo at TBS (Tokyo Broadcasting Service). Initial ambience was recorded in Tokyo's 2016 Chinese New Year parade.



After many months of communicating by Skype, LINE, and email,  
We travelled to Tokyo to finalize our theme song and sound direction





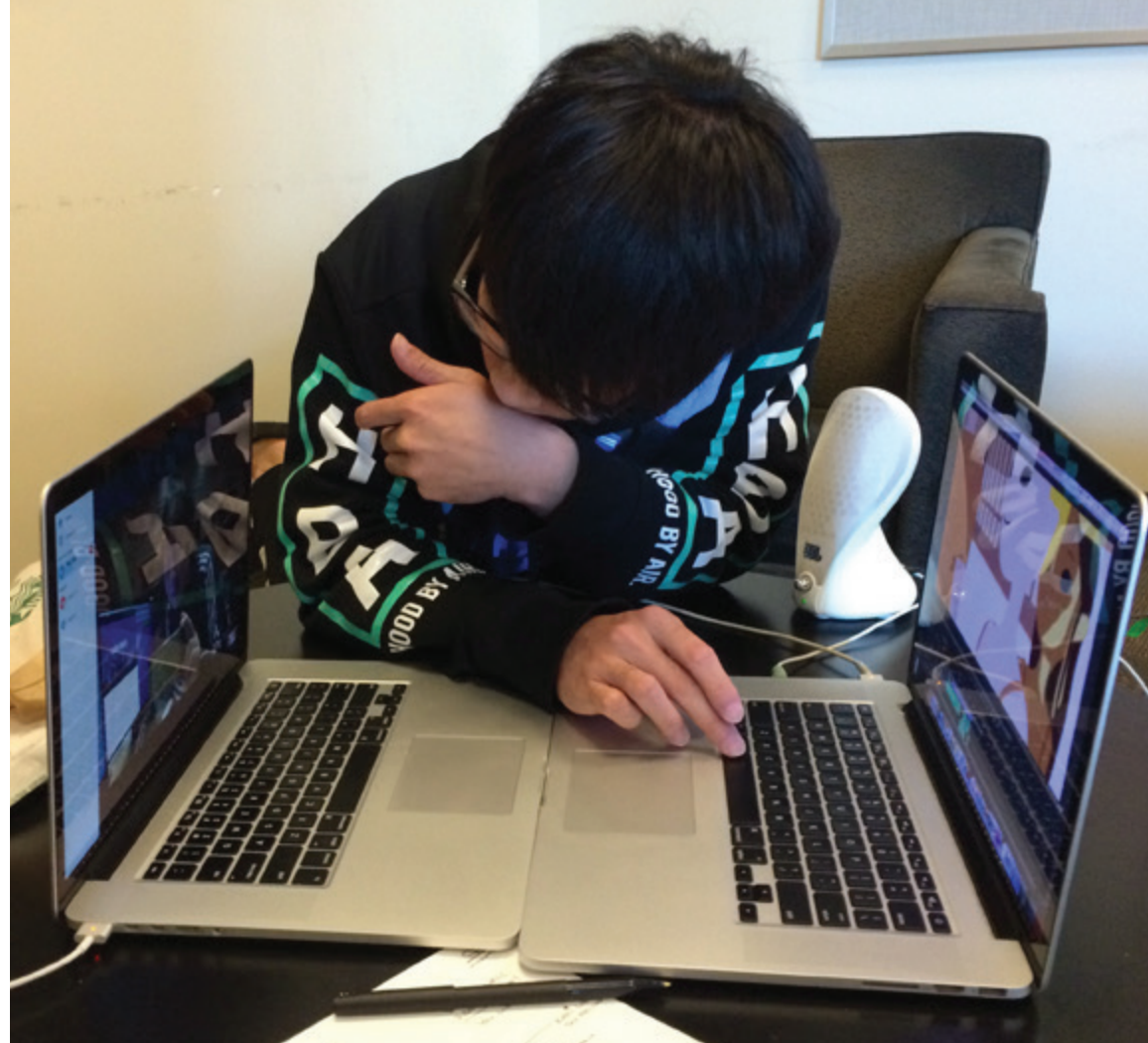
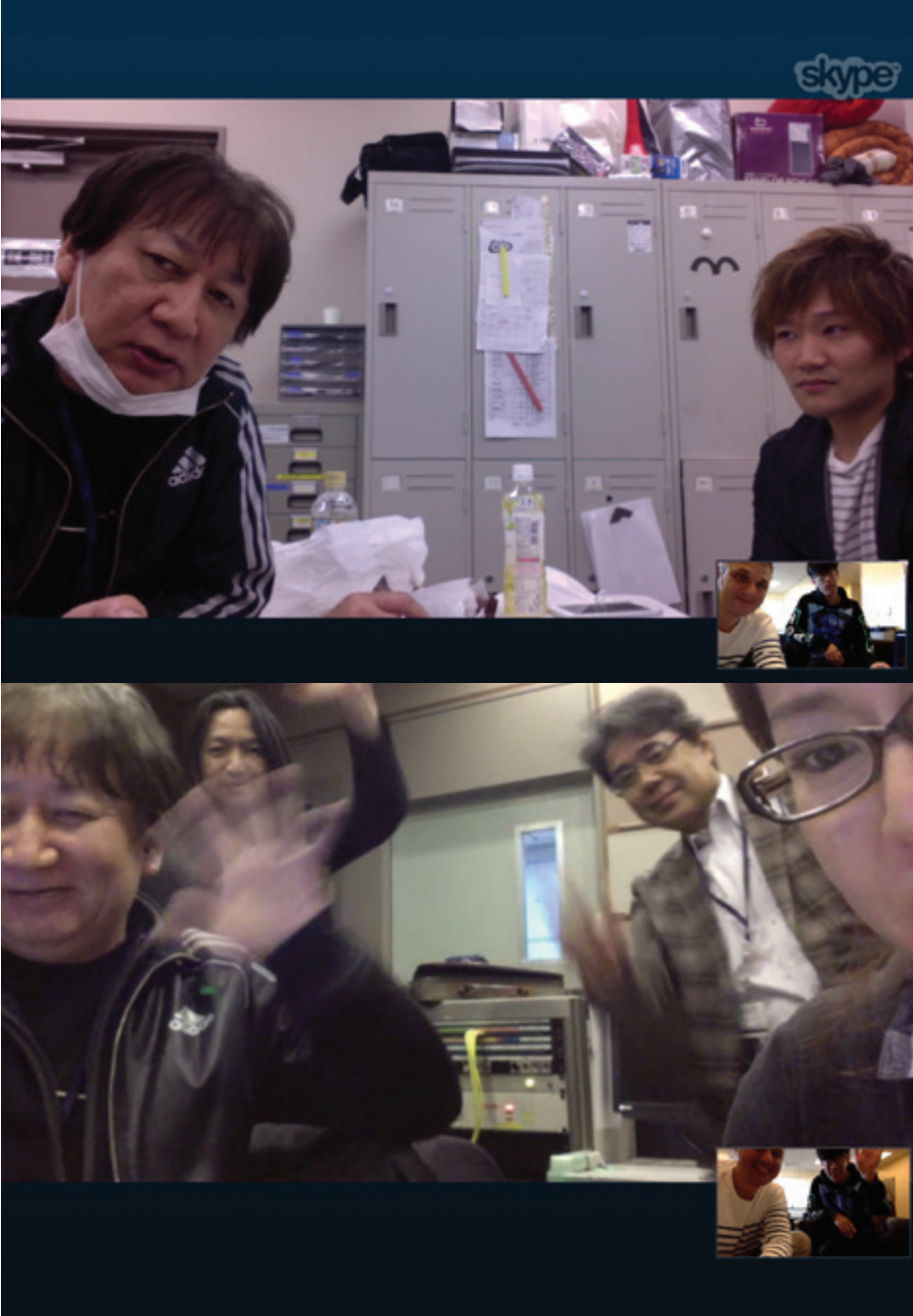
We worked with Okubo-san, the arranger and composer of J-Pop star Gackt, to create our final theme song which was used on our end credits and throughout



TBS and Okubo-san worked with us for ~15 hour days, for the duration of our 10 day trip, in 2 Tokyo-based studios to achieve our goals



We recruited 2 of TBS's presenters, to be the voice actors for our efforts



After our visit, weekly Skype meetings helped us all to communicate and to finalize all sound and score design needs, until mix-down



Our team travelled to LA, for a final mix-down session at USC

### 3. Final Light and Render



1. Main storytelling animation was blocked out and completed in Maya;
2. Layouts were created and animated for that camera in Maya;
3. Frames were taken into Photoshop for color design;
4. Final design was then achieved in Maya and After Effects.



LION DANCE by Tim Pattinson MFA and Zheng Kang MFA, USC Class of 2016



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