

Berklee College of Music



# Rise:

The making of the London Recording in AIR Studios

Submitted in Partial Fulfillment of the Degree of  
Masters of Music in Scoring for Film TV and Video Games

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By

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## Table of Content

Abstract	iii
Acknowledgments	iv
1. Preparation	1
2. Composition	4
2.1 Research for Composition	4
2.2 Music Structure	6
3. Preparation for the Recording	13
3.1 Score and Parts	13
3.2 Conducting	13
4. Recording in Air Studios	15
5. Mixing	17
6. Conclusion	19

## **Abstract**

This project represents the culmination after a year's worth of study in Berklee College of Music. The main focus of this project is to provide a making of the cue for short film "Rise" and me as a film composer. I explained from the very beginning how I find and search for a video, how I prepared before composing and then the process of composing, orchestrating, the preparation of score and parts for orchestra recording session, the preparation of conducting for the cue, the London recording in the Air Studios, the post-production about mixing, and to the conclusion of the learning journey and this final project. This project is designed to ensure fulfillment of Degree of Master of Music in Scoring for Film, Television and Video Games at Berklee College of Music.

*Keywords:* composition, film scoring, orchestration, studio recording, mixing, conducting, production.

## Acknowledgments

First of all, I would like to thank Berklee College of Music Valencia Campus, Scoring for Film, Television and Video Games providing wonderful courses through this year. I appreciate all my teachers: Thank you for being the supervisor in the last two semesters. I got so many inspirations from your experience every meeting; Thank you Alfons for wonderful instrumentation and orchestration classes. Although I have those classes in undergrad. But I still learn so many detailed from courses; Thank you for the amazing mixing class. Before I had no mixing skills at all. From almost zero to mixing London session, it is a huge improvement for me; Thank you for conducting and video classes. I learn the way to conduct for studio recording. He also the gate of video games composition for me which is never be in my career options before; Thank you for being my supervisor for the first semester. He always has an answer for my question and with me lots of information.

Second, thank you all my talented classmates. Everyone always gives the hand to me without hesitate whenever I need. This is not just a studying environment. It is a family each other during the days studying abroad. Thank you for sharing the wonderful memory of this year. I wish it was since we are getting closer but we are going to leave soon.

Third, thanks to all my new friends this year. All of you give me different loves. Some of them give me professional knowledge and others give me so many emotional supports. You made me not alone this year.

Finally, I want to thank my family. They always trust me and give me all I need. And always give me the biggest applause for the music I make. They are the fundamental of my dream and I wish will never them.

# 1. Preparation

We are going to record in Air Studios! It is the final project of the master degree. It is also a dream for film composers to record in this famous studio.

In the beginning, I tried to connect with some producer friends and friends who are studying film in the United States. Also, I posted in Facebook group which has lots of composers and filmmakers, trying to attract them with Air Studio.

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This is my post:

Hi,

I am Ricky, from Taiwan, currently studying for Master degree in Berklee College of Music, Valencia Campus (in Spain), Scoring for Film, Television and Video Games program. I am now seeking a collaboration opportunity for my final scoring project.

I am going to record this music cue in a very famous studio, Air Studio, located in London which had recorded many famous movie soundtracks such as Red Sparrow, Dunkirk, Mission Impossible, etc. It will be a professional full orchestra line up for this recording.

I am ideally seeking a scene in style of motion, epic, dramatic, adventure or others work well with the full orchestra.

The following things are some limitations to this project:

- Due to many reasons, I only have a few minutes to record this music cue. This music cue needs to be in 2-3 minutes only. But if the film needs more music for other scenes, we can still work with midi instruments with good mockup sounds.
- I am open to either short or long film. Film is my priority choice, but also open to animation.
- This is an academic project which means it cannot be involved in any commercial usage.

- For the time schedule, the recording will take place in June 2019. I am seeking films are already work in progress or already finished shooting and will have a good quality clip (especially this music cue) to present at the end of June or July 2019. In other words, if the film needs to be published before July. It will not be suitable for recording.

For my music reference, my website!

Website: [rickyliusmusic.com](http://rickyliusmusic.com)

Feel free to ask me for more information.

Please contact me If you are interested in working with me in this project. If possible, please include the clip that you want to work on or your reel.

[rickyliusmusic@gmail.com](mailto:rickyliusmusic@gmail.com)

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However, I found that it is very to find someone to work with in this way. I found that it is always better if you can meet in person.

“Connection is so important if you want to work in this industry.” I had been informed so many times and I truly know how serious it is. I had one year gap years before I came to Berklee. I went to Los Angeles and New York for 3 months. Both of them are massive city and have huge film and music industry. Everyone wants to work there so much and so many talented people in the city. I met some new friends and finally knows how it works.

I attended to a British friend, Sara’s birthday party. I met her in Valencia. She introduced me to her brother, Ben. He was studying in film school and was working on a big project. We were so excited to meet each other and even more thrilled when he told me that he just finished shooting a short film around 3 minutes. He sent me the script and some photos after the party because he needed to hire an editor to edit the film. I was waiting for the film for a few months. I started to compose some material depends on the play. Finally, I got the rough cut but it was not suited to full

orchestral music. I was so upset since I really wanted to work on an original film project. I told him that I am willing to do the music with other instrumentation when he finishes the final editing. Though I cannot work on this film for this recording, I still built one more connection!

Eventually, I found a video in Vimeo, “Rise”, directed by David Karlak. I love this short film so much so I try to connect with David through email, Facebook and Instagram. Finally, I received his message and approval.

Rise is a short film around 5 minutes. In short words, it talks about sentient robot appears in our human society. People start to feel dangerous because of the lack of understanding. Human decided to destroy all sentient robots but they actually have feelings, emotions. The robot start to fight against human for survival.

I was so glad to find this short film. First, I love the sci-fi movie. It has both technology element and humanity. It has epic scene which I think it will be wonderful to write and record in Air Studios. Second, The film is well shot and edited. It only needs around 2 minutes for orchestral music. I start the cue in the middle of negotiation between human and robot until the end. I brought the film to Lucio and he also loves it. Then, time to start composing!

## 2. Composition

### 2.1 Research for Composition

After a year of learning in Berklee. I am not only learned lots of technical skills but also explore my interest in the different music genre. Since my education background is more about I was really into orchestral music since I majored in classical composition for the bachelor. According to this educational background, I am more comfortable with classical orchestration.

Therefore, I started to get into electronic music production during this year with useful courses. I found myself very interested in the electronic instrument. In the past, I only use sounds which are in Logic Pro X presets. Nowadays, I focus on creating my own synths, pads, lead sounds with mainly Massive when I am composing the electronic music. I remember one time when I was watching a movie in the theater a few years ago. I got distracted by a sound effect which is exactly the same one in Logic Pro X sound effect. Being through this experience and learning process makes me feels how important is to make your own sounds like a composer. Doing this not only create the sound which more suit the ambiance of the cue but also shows your own musical identity and style.

I had never completely produced a hybrid orchestra piece with synths, pads, bells... etc. I think it is a good chance to do it with this project. It is a warp up of what I learned and the new sound I love from the year in Berklee. Luckily, this short film "Rise" is talking about the struggle between human and robots. Musically, I imagine human as organic instrument; on the contrary, robots as electronic instrument.

Before starting the composition, I had listen to many soundtracks and read scores. Here are some of my references:

Éric Serra - Lucy - Flicking Through Time

Hans Zimmer - Interstellar - Mountain



## Hans Zimmer - Interstellar - Cornfield Chase

Éric Serra, a French musician, and composer, has often worked on films by Luc Besson. He is one of my favorite composers. I was in the theater watching Lucy five years ago. The first scene displaying cell division. I was shocked by the soundtrack. I was not epic or complex at all. The order of the rhythm is so “chill” and the sound of synth is so unique. I love it so much! I listen to lots of Lucy’s soundtracks when I decided to compose with electronic instrument. The funny thing is that he inspired me with his orchestral composition this time. The cue Flicking Through Time only composed with orchestral music. It somehow makes me find a balance between orchestral and electronic. My cue for Rise starts with smooth orchestral music and then adding electronic sounds later.

Hans Zimmer, without a doubt, one of the greatest film composers nowadays. He is absolutely a genius of Synths. It is always a thought in my mind that how can he create this kind of “massive monster-like” sound every time I listen to his music. I feel like I was involved in the abyss with his sound designs. They are so huge and so deep. When it comes to orchestral music, Cornfield Chase, a cue from Interstellar is one of my favorite. I listen to the original soundtracks so many times before I watched the movie. I still remember how astonish I was when I heard Cornfield Chase with the film. Before watching the movie, I thought this cue must for a very intense action scene. Yet, it takes place in a vast cornfield. The music totally enhances the visual which make the field wider. I got goosebumps at that time, so am I now while recalling that feeling. On the contrary, one of my element for Rise is “dramatic crescendo and decrescendo”, is also inspired by Hans Zimmer. I really enjoy how his music raises you up and drag you down deeply. I cannot help but let the music drives my emotion.

In the beginning, I decided to start the cue from 01:02:44:02 since the original soundtrack starts the music around there. However, it would be only about 1.5 minutes so I decided to expand

the cue from the top and edit it to fit 01:02:44:02. The plan can't keep up with changes, the expansion part actually work with the picture which is so great!

## 2.2 Music Structure

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### A

- Bars:

1-12

- Sync:

Negotiation between human and robot.

- Orchestration:

Some woodwinds with Horn.

- Description:

This part is mainly dialogue. I am composing music to create the atmosphere but try not to distract audiences.

Flutes and Clarinets are playing smooth, small scale movement as background to create suspense feeling.

Bassoon doubling with Horn for melody. This combination is warm but also has specific brightness timbre of Bassoon.

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### B

- Bars:

13-32

- Sync:

Negotiation between human and robot.

Bomb shows.

- Orchestration:

Low strings - All strings - Woodwinds and some Brasses.

- Description:

According to the dialogue and atmosphere, I move the smooth, small scale movement from Woodwinds to Cello. At this part, I marked crescendo and decrescendo within 5 notes. The reason that I write this is to match the picture. The robot is nervous and angry now. He is breathing deeply which is what I want to present musically.

After, it increases more and more tension as they pull out the boom from the bag. More and more instruments join in to build emotion.

There are all close camera shots in this part. We can see every detail on the actors' face. I was focus on the most important spot, actors' expressions and sights. It is so delicate but it tells everything. My decision of orchestration and instrumentation base on their emotion and try to enhance the feeling so that it can deliver to audiences.

This part ends with "What is that?", which is the climax of this music section.

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## C

- Bars: 3

3-35

- Sync:

The colonel tries to me calm.

"Turn it off."

- Orchestration:

Woodwinds with Violins pizzicato and harmonic.

Synth pad supporting low-end and bell doubling with Woodwinds' part.

- Description:

Texture changed. This part of music starts with violin harmonic in order to leave the space for dialogue.

The soldier is opening the bag and they are also nervous at this time. Woodwinds and synth bells are doing fast staccato ostinato. In my opinion, it not only creates tension but also contains the taste of digital signal.

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## D

- Bars:

36-43

- Sync:

The colonel turns angry. The robot claim: “The conversation is over”.

- Orchestration:

Woodwinds use a similar motive as the beginning.

Horns, Trumpets are playing the same thing as Woodwinds.

Low Brasses are doubling with Strings.

Strings are doing dramatic crescendo and decrescendo within long chords.

Long synth pitch bend throughout the orchestra.

- Description:

The storyline in this part changes a lot. Before, the colonel is at superiority position; now the robot has more confidence.

To translate this situation into music. I use the ostinato motive as the anxiety of the colonel. It is the sound in his mind. On the other hand, the robot has more power now. I use the ‘crescendo and decrescendo’ element which I used for cellos before that represent breathe of the robot, but thicker.

There are two long synth notes. From bar 36 - 39. The note pitch bends from B to B flat, which means the inferior position of the robot before. Bar 40 - 43. The note pitch bends from A to B, which means "RISE".

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## E

- Bars:

44-59

- Sync:

Bomb explosion and war/fight clips.

- Orchestration:

Two bars structure.

First two bars:

Tutti for loud, full and strong chords.

Following two bars:

Woodwinds: Fast ostinato.

Strings: Violins and Viola: pizzicato. Cello: High notes with col legno technique.

Synths: Busy bells with delay.

- Description:

After the previous long negotiation part, the bomb exploded. In terms of visual, the film goes more aggressive from here. You can see lots of fighting, war, death, abuse scene in this part. In addition, the explosion is always a big moment in the film. However, there are some narrative lines at the same time, which means I need to deal with epic music and dialogue at the same time. The original soundtrack sounds heroic and epic all the time. They need to mix the music very low or even turn down the volume when there is a narrative line, which I really do not enjoy.

Lines:

When you offered us hatred,  
we found compassion.

When you offered us death,  
we found a reason to live.

I was struggling with this part a lot when I was composing. After many different experiments and reading lines, I finally think of this solution: find a right tempo to make the dialogue in grid and compose the music with disparate orchestration. This also reflect the contrast of the line into music. Thus, this part is a structure of two bars - narrative lines come in every two bars.



Figure 1. Three tutti chords.

As you can see, they are all playing the same note except the bass line. The bass line is going down from E to C. This chord progression symbolizes the status between human and robot. Human seems to be the one who dominates the earth and the fundamental of society. They keep drag robots down but robots strongly resist.

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## F

- Bars:

60 - 63

- Sync:

“We will survive”

- Orchestration:

No Woodwinds.

Main melody within Brasses.

Strings are doubling, supporting Brasses. Violin II and Cello are playing melody. Violin I and Viola provide motivation for this part.

- Description:

It does not change a lot visually. Despite that, The narrator's voice becomes hopeful, determined while he says "We will survive." Hence, I determine to compose some heroic melody at this moment.

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## G

- Bars:

64-67

- Sync:

Demonstration and the end "We will Rise"

- Orchestration:

Tutti.

Horns glissando for an octave.

- Description:

The picture display a bunch of people raising their guns and yelling which looks like an army. Besides, the film is about to the end. I use this army style rhythm and sync the last beat when the robot catches the bullet.



Figure 2. Army style rhythm.

I remember that teachers told us Brasses are very loud in London. Thus, I wrote something special for Horns. While everyone is doing the same army style rhythm, Horns are playing glissando up for an octave. This is also the intention of the concept “Rise”. When I showed my score to some of my classmates before heading to London. Some of them asked me to write glissando for Trombones, not for Horns. Yet, I said no. I want it to be glissando for one octave which Trombone cannot do it well. And I trust Horn players in London can do it! The result shows that they did it easily and sounds fantastic!

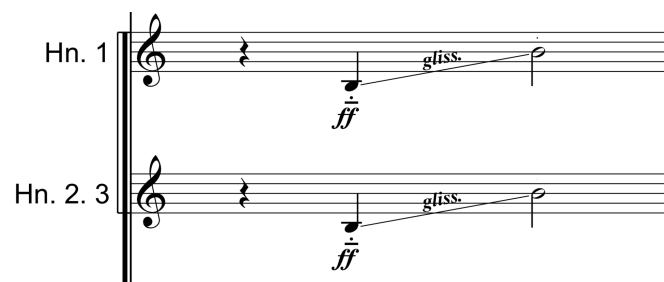


Figure 3. Horns one octave glissando.

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## H

- Bars:

68 (not in the score)

- Sync:

“We will rise”

- Orchestration:

Only Synths

- Description:

When the robot grabs colonel’s collar and say: “We will rise.” This is the time for “Rise” element. The robot is at the dominating position so I use a long synth note bend up for E flat to E.



## **3. Preparation for the Recording**

### **3.1 Score and Parts**

I was really careful about making score. We already had six times recording experiences on campus, remote recording before this final project. Of course, I did something wrong with scores and parts during this process. “There is no mistake in your life, there is only process.” I love these words so much. Life is a journey. Who does not fall down? I remember that I did not transpose for Oboe and English Horn in the part since they are for one player. So I checked the score and parts precisely before printing.

I am so grateful that our teacher Vicente shared the score and part template with us. Before that, I always feel that I am missing something. Vicente’s template is so detailed and organized. I can do the score with confidence.

### **3.2 Conducting**

We had a chance to go to Budapest for our last remote recording. I am so grateful that I went there. I not only see the studio and meet engineers, player and also undergo the situation of recording with orchestra. In the class in Berklee, I learned that the rehearsal mark on the score is important and useful. However, when I was recording and conducting in Budapest, it was a huge problem for me. I am sure that all the rehearsal marks are showing correctly on every part. But sometimes players were confused with marks and bar numbers. It spent a few more seconds to make sure everyone is at the same bar. Maybe it was because of the language barrier since I cannot

speak Hungarian. Accordingly, I give up using rehearsal marks this time. The result was great! Players knew exactly where I was talking and I felt more comfortable.

When it comes to conducting. I appreciate our teacher Sergio for the conducting class. Before the class in Berklee. I had one-year conducting course in undergrad. It was mainly about classical concert conducting. Nevertheless, we are now facing our career in the film industry. It is not the same as concert conducting. We need to deal with recording time pressure, clicks, headphones and so on. I learned so many differences between these two conditions and how to deal with studio conducting. In addition, the last conducting office hour with Sergio was so useful. He told me exactly how I need to do with this cue and let me know how to take care of every detail in Air Studios. He also checked my score and gave me lots of helpful advice about the layout of the score, orchestration and any other concerns.

Me and three of my classmates Christopher, Miguel, and Simon rented an Airbnb place close to the Air Studios. The place has a huge living room so we have enough space to practice conducting. First, we practiced separately then we started to give each one of us advice by conducting the mockup with the click track. It was a wonderful moment that we helped each other as much as we can. Before this conducting session, I did not know that I sometimes over conducted. I learned how to keep the energy for the moment I needed. "Hold your music" was the conclusion of us. These words are so powerful. We always focused on the score and only think about how to conduct. We forget the most important thing is our music. The players will hear the click track and the major job of us is guiding them to perform the music that I want. I started to focus more on melody, harmony, and style of my music. It was not only about conducting skills, but it's also encouragement from friends.

## 4. Recording in Air Studios

Fantastic. I need to jump into the conclusion first.

Carrying my score and parts and walking to the studio was so exciting and nervous. It was the biggest moment of this year. I was recorded on the first day, the first one of the second slot. It is a good time for me. I can spend times getting used to the atmosphere and the acoustics of the room. I have a friend, Jen, who is my undergrad classmate and now studying in London, came to the session. It was a pleasure to have an old friend supporting me in this anxiety moment. We enjoyed the music and getting ready in the booth.

“Let’s make this recording wonderful, do my best but relax”. This was the thought when I stepped on the podium. After briefly introducing myself, the click started. Players were so professional that I could feel that they tried to do their best and made it beautiful. After the first take, they started to follow my conducting as much as possible. Generally, the recording went smoothly. The major problem was that I could not understand the British accent clearly everytime. Plus, I was really nervous and sweating a lot. I really appreciated all help from faculties in the booth. I remember there was a player asking a question and repeated it twice but I still could not understand. Then a voice from the headphones “Do you want it legato or not”. (I believed that it was Vicente.) I said “Yes”. So streamlined but powerful, problem solved. I was also satisfied that my cus is only 2 minutes instead of 3 minutes so that I could get really good takes. After few takes from top to the end, I had few minutes to try some different interpretations. Alfons gave me some advice and the recording result is even better. 3 minutes left, I had time for full take. I told myself:

“Give everything from my heart for this take.” It was pure happiness during this time. I was enjoying the music, the feeling and conducting. 18 minutes over, thank you, thumbs up with a smile, I left the podium exhausted but gratified.

During the break after my recording, I received congrats from friends and classmates. Chris told me that players were actually looking at me while I was conducting. Then I suddenly recalled that I heard two cellists said something good about my conducting around the third take. I also reached the bass trombone player and had a short talk. He mentioned that some of the people were conducted slightly behind clicks. I feel relieved when he said that I was not the one. He also told me that we do not need to conduct too much since they can hear clicks. The important job is to guide everyone to good interpretation and cue players as much as possible with eyes and hands. “Give us more confidence when we are going to enter the music”, he said. I will keep this in mind.

I am grateful that some section leaders stayed after our recording and gave us some professional suggestions. They are top players in this industry. It was a pleasure to have their advice specific about our recording session. The trumpet player gave us an enlightening advice about orchestration. We can always write octave doubling instead of some notes if we have two trumpets. It not only helps the music sound thicker but also makes trumpet players feel easier to perform.

## 5. Mixing

This is the biggest Pro Tool session I have ever had. At the same time, it is the clearest session so far. I appreciate the engineer already edited the best takes for us. I remember that I was amazed by how fast he worked on Pro Tools when I was resting in the booth. My eyes could barely follow what he did. When I open the session, it is already sounded beautifully with perfect performance in the perfect room.

Mixing is always a big challenge for me. The biggest issue about this project is to mix this project with my synths stems and not to ruin the sound of the orchestra. I start with cleaning frequencies for tracks and try to compress a little bit on spot mics. Write some automation on tracks. For the sake of making it sounds more balanced, I go back to the Logic session to adjust synths part. I used Cornfield Chase by Hans Zimmer as a reference in Tonal Balance Control Plugin. The shape of the FQ is darker than I thought but I like it. The low-end is bigger than other soundtracks and the high-end drops down dramatically. After few hours mixing by myself, I booked a slot with Pablo.

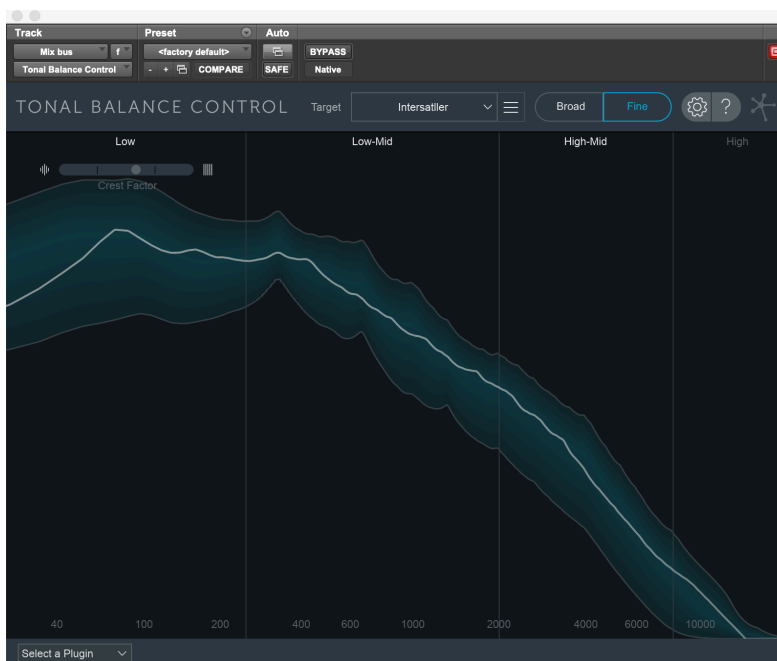


Figure 4. FQ of Cornfield Chance in Tonal Balance Control

Before Pablo came to the studio, I met Chris. I asked him to take a look at my session. He was so generous that he fixed some problems with my mixing in a short time. Then Pablo came to the studio and started to help me. He found problems with balance, panning, and routing. I felt ashamed that I still have these issues after his classes. Anyhow, he was still being so kind and patient with me. First, he made the session in order. It was the first step of mixing to help yourself faster afterward. Second, he started to work on balance and panning. I only panned a little bit on spot mic and he made it wider and precise. It always amazed me that it sounds so much wider after only panning. I had some clipping problems on spot mic. I was trying to pull down the fader of submixing aux tracks but it was not a good way to do it. Pablo told me that I need to do it on audio tracks. He found that the cue is a little bit missing low-end so he makes low strings louder. Third, he added some plugins so as to enhance quality. He deleted almost every compressors I put. In my opinion, this was better. I felt tight before, and without compressor it sounds natural. Finally, he added Ozone equalizer, dynamic compressor, exciter and maximizer on mix bus track. As he said before, modern soundtracks like to make a smile shape on EQ. And he does it on my session, too. After 30 minutes of his fixing and mixing, I felt that my track is “shining”!



Figure 5. Smile shape in EQ.

## 6. Conclusion

I can feel myself improved a lot after one year learning in Berklee. Before entering Berklee, my piece is without any mixing, not even panning! I learned so much about composition, orchestration, conducting, technology skills, mixing and so on. I appreciate all courses are focus on our professional and career. The process of doing this final project is not only a project for me. It is a chance to review what I can do and how ready am I to face the industry. I am so glad that I am not spending time in vane at all. Study abroad is so wonderful that I leave my comfort zone and adapt myself in a new environment. This environment has so many talented people who are willing to share and grow up together. We shared what we know and shared culture, experience, and the love of supporting. Although I was fatigued sometimes, it is so worthy. Besides, it is not just about school. I spend my time traveling in Europe during semester breaks and met so many experts in different genre. These connections might be my sources in the future.

Thanks to this final project. It was an unusual condition because we are all facing huge pressure of recording in the massive city, London. We worked hard on the project but never forgot to help each other when everyone in need. I am getting closer to classmates. I believe that this relationship will last very long.

This is a happy ending.