

Trip to Siggraph 2010 in Los Angeles From 07/23/10 to 08/01/10

Edwige Lelièvre's Report



Downtown Los Angeles

Table of contents

Acknowledgment.....	2
1. Introduction.....	2
2. Siggraph 2010.....	3
3. Visit of the Animation's Studios.....	8
4. Los Angeles & the Americans.....	11
5. Conclusion.....	14

Acknowledgment

I would like to thank the Embassy of the United States in Paris and Cap Digital for allowing me to do this exceptional trip to Los Angeles and participate to Siggraph 2010. I thank in particular Galina Gringer and Jean-Aria Mouy for organizing this trip.

I also thank all the persons I have crossed during this trip and that have been so warm and welcoming to us, especially Dawn Rivera-Ernster from Disney Animation Studio and Chad Hellmuth from Sony Pictures Imageworks.



1. Introduction

Thanks to the Embassy of the United States in Paris and Cap Digital, I had the possibility to participate to a trip to Siggraph 2010 in Los Angeles at the end of July 2010. It was the first time I went to the USA.

As a PhD. Student in the field of Numeric Image, I was of course very interested in participating to Siggraph for my researches. I was also interested in finding internship and making contact for potential future jobs. In the top of that, I was really curious of discovering the USA and their culture.

The Siggraph is the world's most important convention about computer graphics, and I was very concerned by papers and courses of this year. Indeed, several conferences were about stylized rendering in games, what is one of my main research theme.

The visit of the animation studios (Dreamworks, Sony Pictures Imageworks and Disney) has been a very good surprise for me, as we had the chance to meet people actively working in the industry. I also get very good feedback about my profile for a future candidature.

In addition to the Siggraph and the visit of the animation's studios, this journey allowed me to discover the USA, and more specifically the American and their way of life.

2. Siggraph 2010



The Convention Center

Siggraph 2010 took place in Los Angeles' Convention Center from 25 to 29 July. It had a very intense program that implies hard choices from the attendees : it was impossible to see everything because there was so many interesting conferences and events to attend !

I decided to follow in priority conferences with high value for my researches and also where I had a chance to meet people from the video game industry.

The level of the conferences was very high. It was in-depth approaches of state-of-the-art computer graphics topics. The speakers were only professionals or researchers.

It was sometimes difficult to understand considering the level of maths and physics required for some conferences (about collisions for instance), but was often inspiring and always very valuable for me.

Besides, several big events were proposed to Siggraph attendees. I particularly enjoyed the Emerging Technologies, the Exhibition and the Job Fair.

If I was very shy at the beginning, I forced myself to go and talk to speakers and others attendees. At the end, I was quite comfortable with that exercise and I get a lot of very interesting contacts during the conferences.

Conferences and events I attended during Siggraph :

Sunday, 25 July

- 1/ Course : Physically Based Shading Models in Film and Game Production
- 2/ Panel : Future Directions in Graphics Research
- 3/ Technical Papers Fast Forward

Monday, 26 July

- 4/ Course : Stylized Rendering in Games
- 5/ Course : Recent Advances in Real-Time Collision and Proximity Computations for Games and Simulations
- 6/ Emerging Technologies and Art Gallery
- 7/ Computer Animation Festival – Live Real-Time Demos

Tuesday, 27 July

- 8/ Art Papers : Design and Computation. Process, Product, Play
- 9/ Technical Papers : Expressive Rendering and Illustrations
- 10/ Course : An Introduction to 3D Spatial Interaction With Videogame Motion Controllers

Wednesday, 28 July

- 11/ Course : Advances in Real-Time Rendering in 3D Graphics and Games I
- 12/ Exhibition
- 13/ Course : Advances in Real-Time Rendering in 3D Graphics and Games II

Thursday, 29 July

- 14/ Game Papers : Game Design
- 15/ Job Fair

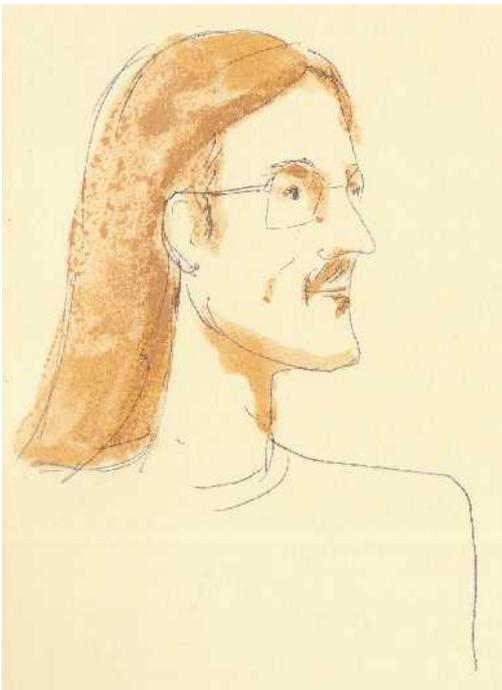
Here is the detail of conferences and events that I found especially interesting :

4/ Stylized Rendering in Games

This course was presenting several examples of games using non-realistic rendering. The advantages of stylized rendering for a game are :

- standing out of the crowd of realistic games with unique graphics
- improving player's immersion
- having a beautiful game without asking too much power from computers and consoles, what leaves room for gameplay, artificial intelligence, etc.

The speakers were from Ubisoft, Uber Entertainment, Electronic Arts and Gearbox Software



Sketch of Henrik Halén from Electronic Arts

The discussions were about how to carry the artistic vision of the game in terms of graphics programming.

In the game *Mirror's Edge*, the idea was that the main character has color deficiency, so she see the world almost only in white, except for important details, that are colored. To get a whole world in white implies a lot of work on details and very specific lighting with global illumination.

It was also about the cultural issues created by stylized rendering. In *Prince of Persia* for instance, the team developed an atmosphere close from Miyazaki's animated films. If it was interesting for European customers, it didn't fit the taste of North-American customer. Finally the team had to change the rendering of the game into something more realistic.



Screenshot of Prince of Persia (Ubisoft)



Screenshot of Mirror's Edge (Electronic Arts)

As this kind of rendering is one of my main research theme, this conference was very instructive. I kept the contact with Henrik Halèn.

6/ Emerging Technologies and Art Gallery

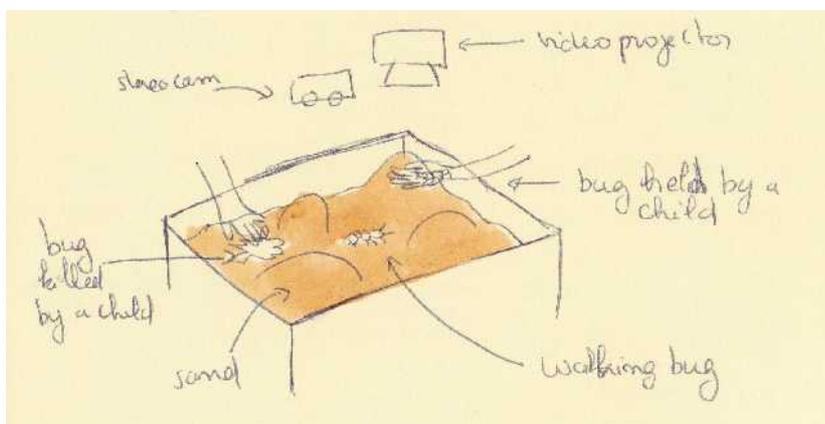
The Emerging Technologies is a place where new non-commercialized interactive technologies are demonstrated. The pieces shown here were very inspiring to me.

For instance, the installation “Lumino: Tangible Building Blocks Based on Glass Fiber Bundles” was very interesting : it shows a possibility to interact physically with a tabletop computer thanks to glass fiber materials, that allows light spreading through the elements. They created a small building game with that principle. The creator also added it would work even better in the next few year with new kind of plastic that already exists but is too expensive for the moment.



“Lumino” and the glass fiber bundles on a tabletop computer

The Art Gallery presented different piece of interactive art. One I especially enjoyed is “Glowing Pathfinder Bugs”. Bugs are video-projected into a tub filled by sand. The bugs evolve in the environment that can be modified by the player by just moving the sand. The variations in the sand height are taken by a stereoscopic camera. As this installation as be made mainly for children, the creators also included the possibility to take bugs into its hand and to kill them.



The principle of Glowing Pathfinder Bugs

I had the chance to meet the creators of this installation during their Art Paper “Glowing Pathfinder Bugs: A Natural Haptic 3D Interface for Interacting Intuitively With Virtual Environments”

12/ Exhibition



Entrance of the Exhibition

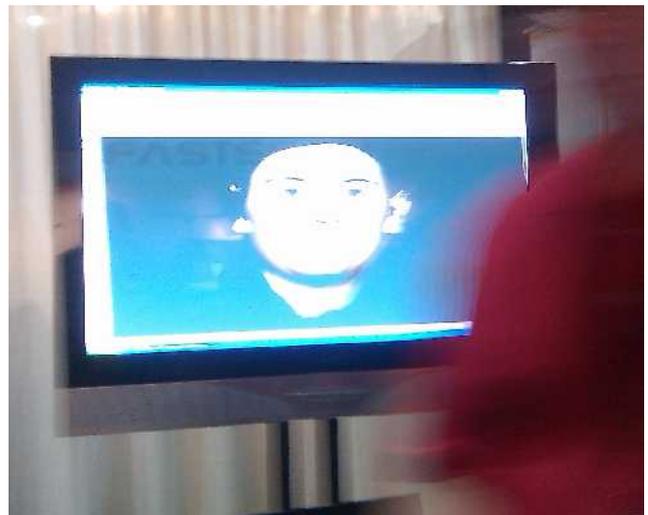
On the Exhibition, many companies working in the field of computer graphics and virtual reality showed their work. It was the occasion for me to try new stuff, both software and hardware.

There was a lot of big exhibitors like Autodesk, Nvidia, Chaos Group, Pixar, Wacom and Xerox proposing animations on their stands. Pixar was for instance giving away its famous limited edition teapot, what created a huge queue.

Among other things, I tried the FastSCAN Cobra C1 from the company Polhemus. It is a portable laser device that allows to scan objects and persons and then get a 3D mesh of the result almost in real time.



My face being scanned by FastScan Cobra C1



The 3D result, almost in real time (more impressive on the screen than on this picture)

There was a lot of 3D scanner displayed at the Exhibition, some more accurate, some faster, some more easy to move and some cheaper : hard to choose !

Some other companies, like THQ, were here to inform 3D artists and developers about openings. It was another to catch the attention of the public in addition to the Job Fair.

There was also a lot of shops, selling specialized books and magazines that are usually hard to find.

3. Visit of the Animation's Studios

1/ Visit of Dreamworks

The beginning of Dreamworks' tour was much like any touristic tour, showing 30 students the cafeteria, the "lagoon" and the learning rooms but no studios.

It could have been very disappointing if we didn't talk to Jim Conrads at the end. He gave us very precise contacts for entry level positions as well as tips about internships. They are not very popular for international students here, because they cannot be hired during two years after the internship. He also advised me to get in touch with former students of my University working for Dreamworks. He looked quite interested in my profile, what was quite a surprise for me because my profile was specifically shaped to fit the videogame industry needs !

Dreamworks offered us the chance to have lunch in their cafeteria. So I decided to be brave and eat with employee rather than students. The people I ate with were working in visual development on Kung Fu Panda 2. I gave them my business card and encouraged them to call me if they come to Paris, so I can give them useful advices about where to eat, make some shopping, etc. One of the girl told me she was coming in France in May 2011, so I hope she will contact me when she comes !



Dreamwork's "Lagoon" at the center of their studio

2/ Visit of Sony Pictures Imageworks

We have been very well-received at Sony Pictures Imageworks. After a short presentation of the company, Chad Hellmuth made us visit a part of their studios and meet several members of the team. I had the chance to talk for more than 15 minutes with a very nice technical directors (my target job for the animation industry). I took their contacts and I am already connected with one of them, John Patrick, through LinkedIn (professional network on Internet).

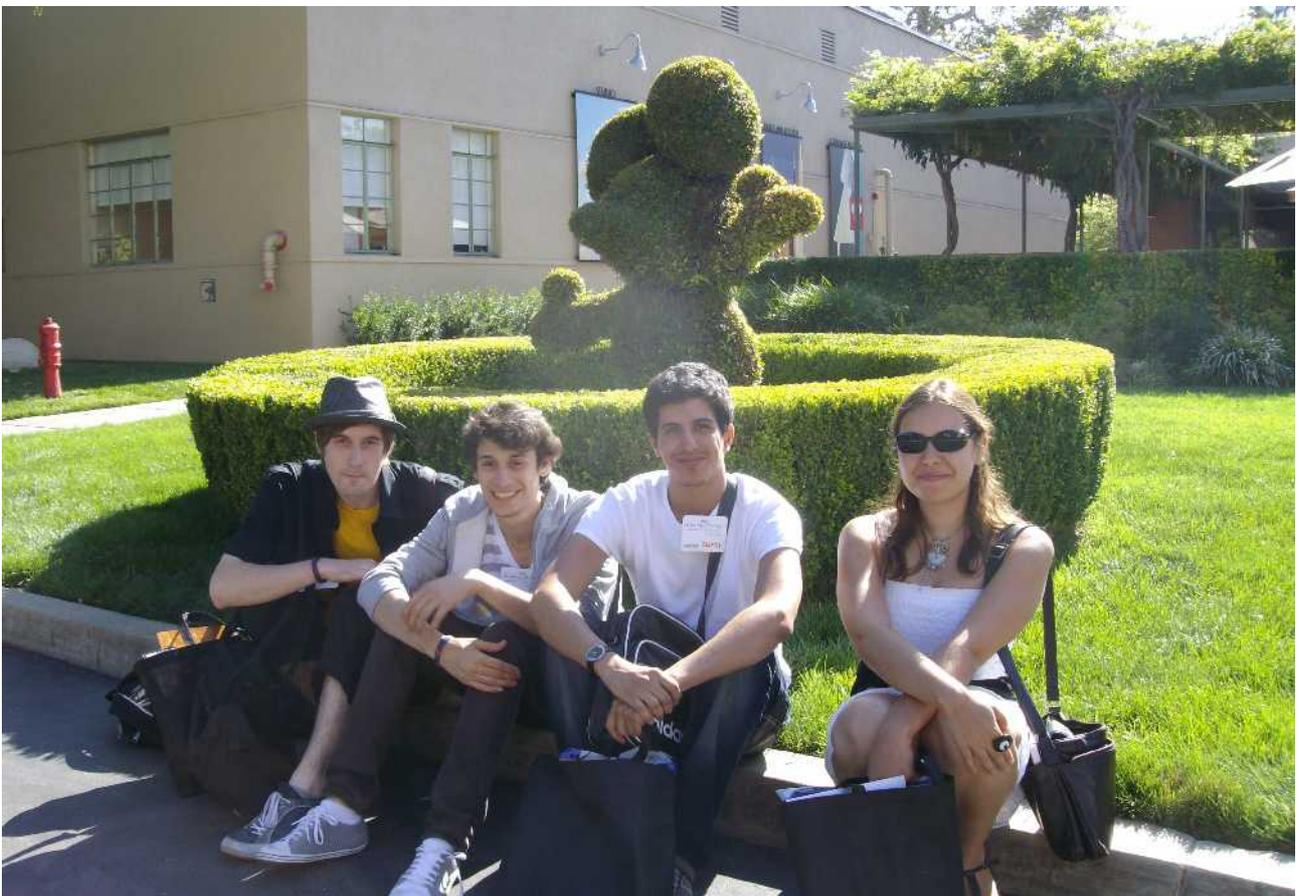
I also learned that in this company, at the opposite of Dreamworks, they are interested in workers with different qualifications. They call them “multi-purpose artists”. However, at the beginning employee are hired for a specific skill. They learn others jobs after being hired, thanks to the very important training offered here.

3/ Visit of Disney Animation Studios

Down Rivera-Ernster, Disney's Talent Development Director, welcomed us very warmly and made us visit the animation studio. She presented us the different departments and made us meet several employee from different fields.

She presented us in detail the very impressive facilities offered to interns and trainee at Disney. It looks like spending a summer here is worth more that a complete year of school.

Then, she made us visit the historical part of the studio, with the archives and the statues. She took about a thousands pictures of us in front of the studios !



Remi, Jean-Aria, Oussama and I, in front of Mickey, in Disney Animation Studios

These three visits of animation studios made me seriously reconsider my career path.

Indeed, I have always been interested in animation, but as computer graphics is a very competitive field, I decided a long time ago to focus on video game industry. The positive reactions in the studios about my profile made me hope this was possible for me to continue also in this path. And actually, I would love to work in these studios on such interesting project. I am sure I could learn a lot and have so much fun working there.

In addition, I have been very astonished to see there was so many women working in the animations studios. I expected much less, like in the video game industry. I appreciate mixed work environment, so that is also a good point for the animation industry.



Jean-Aria, I, Rémi and Oussama in Disney Animation Studios

4. Los Angeles & the Americans

Our first step discovering Los Angeles was to visit Downtown, where was located our hotel, the beautiful Westin Bonaventure. As the breakfast was quite expensive at the hotel, we asked a man in a shop where we should have breakfast in the area. Fortunately, he was living in Downtown and was very nice so he gave us some addresses of typical American restaurants in the neighborhood.

As we had different schedule, I went alone to IHOP for my first American breakfast experience. Before I began eating, two guys sitting at a table next to me noticed I was looking at the Siggraph program and offered me to come with them, as they were also attending this convention. They were both architects creating virtual tours, what I also did in the past, so we decided to keep in touch and maybe to meet again during Siggraph. Besides, the meal was excellent and not expensive at all.

Next day, I tried the Puntry. I also met interesting people there. The waiters were very nice, and the food very good and generously served.



The Puntry : enormous breakfast and warm atmosphere

Before Siggraph began, we went to Venice beach. The weather was grey, but the Californian rock bands were there anyway. We even had time for a quick swim.



Venice beach on Sunday 25th in the morning

Siggraph official parties were valuable to maintain relationship with people already met. For instance, I talked for a while to Richard Marks, speaker of a conference I attended before, during Siggraph Reception on Wednesday's evening. He is the manager of the research and development team that created Playstation Move.

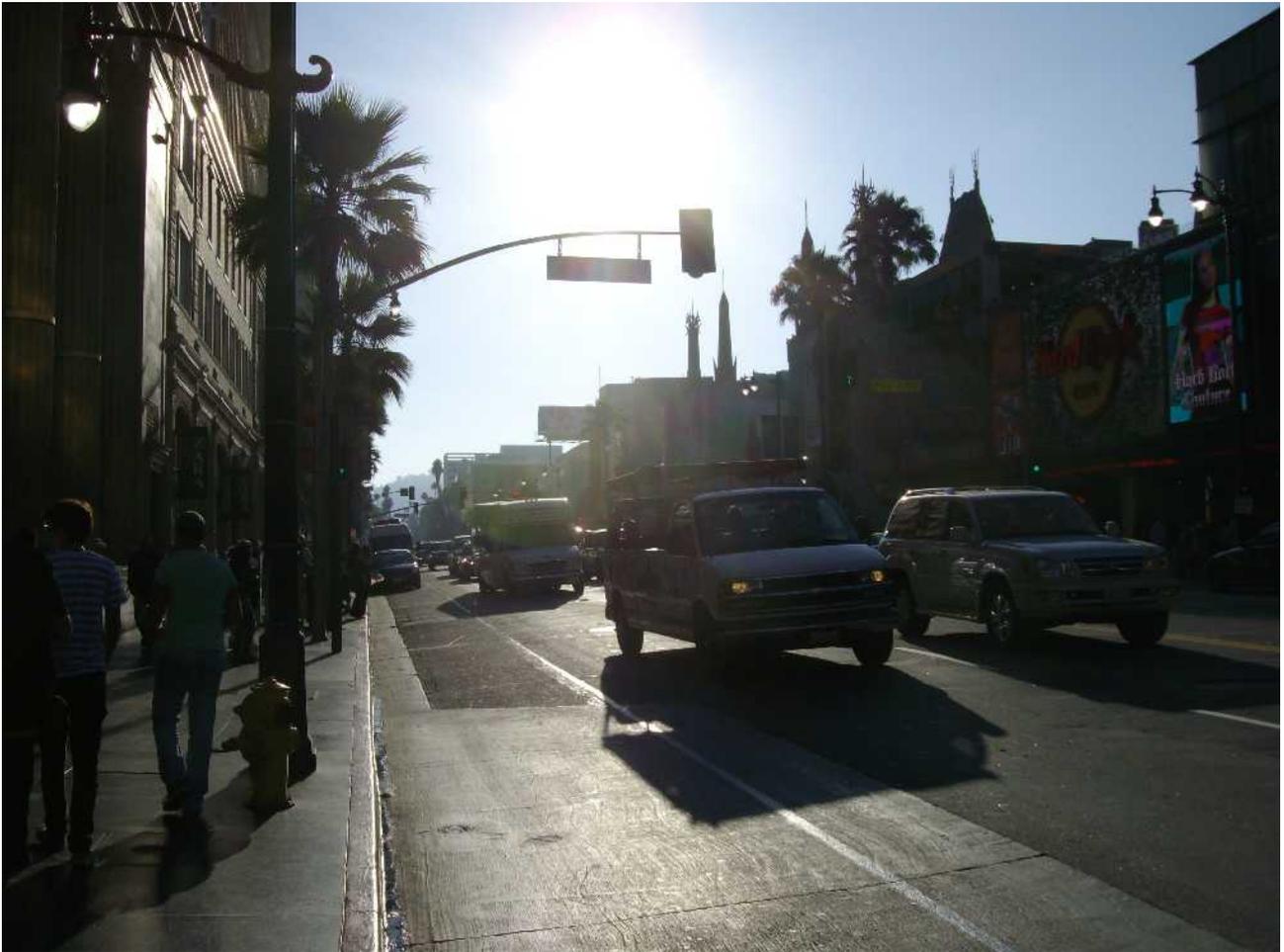
But the most interesting party for me was informal. Larry Kleinkemper, that I met at IHOP, set up a bowling party on Thursday evening between people he just met at Siggraph and invited me to come.

I really appreciated to have been invited, even if I am so bad with bowling. It was really friendly and it gave me the opportunity to know new interesting people working in my field from all over the world. I can not imagine such thing happening in France and it really surprised me in a very positive way.



The whole bowling team at Lucky Strike

At the very end of the trip, we also visited the famous Hollywood Boulevard. If my feeling to live in a film was already strong since I arrived in Los Angeles, it became even stronger when we walked through this mythical place at the end of the day.



In the end, I have to add that I have been very surprised and happy to discover how much American are enthusiastic about France and French language. A lot of people, from animation studios employee to waiters, asked us to teach some French words what has been very funny for me !

5. Conclusion

I feel that I learned a lot during this trip to Los Angeles and Siggraph. Firstly, so much academic and technical knowledge thanks to Siggraph. I also acquired a lot of skills about networking, how to build relationship with people from the same field. I have the impression that I improved myself a lot on this point during the week : at the beginning I didn't dare asking question, whereas at the end I aimed directly to the table of someone I wanted to talk to. I think this in particular will be extremely valuable for my career because it is something I can not learn at the University.

Now, I am working hard on maintaining contacts earned during the trip and answering internship offers. I have found a lot of people that I met during Siggraph on LinkedIn and I plan to use this tool to keep in touch with them.

Thanks again to the US embassy and Cap Digital for the organization and the funding that allowed us to make this incredible trip !

It makes me want to come back again in the USA to visit and, maybe, work.



Rocky Mountains from the airplane taking us back from Los Angeles to Chicago