

Posts from me

Last Day????

Posted on [August 2, 2013](#) by [llitwin](#)

This day went by so fast, I can't believe it's our last day at VRAC! The symposium was a lot of fun, and it felt really professional and exciting. I think people definitely enjoyed checking out our corn maze, AND the oculus rift came just in time!

This summer has been really incredible. It's pretty surreal, as we all sit at our desks in the pod area, that this will be the last time we are ever all together like this. This experience and exposure to grad school, research, and VRAC has been amazing. I am so grateful for this summer and all that I've gained. The term "you learn something new everyday" doesn't apply at VRAC. Its more like "you learn a billion new things and are exposed to really cool VR everyday". I've learned so much about HCI, VR, research, grad school, gaming, cybersickness, Iowa, and myself over these past 10 weeks. I'm so happy with how far my team has come and how well we all learned to work together. Thank you for the best, most unexpected, and rewarding summer in Iowa I could ever have imagined! If any one is ever in Boston, give me a call!!

Some reflections

Posted on [July 31, 2013](#) by [llitwin](#)

Today our awesome mentors took us out for lunch! It was really nice to have a chance to talk with Stephen, Michael, and Curtis outside of the lab and hear (some more) perspectives on graduate school, life, and the REU. I'm really thankful for this summer, and how much more confidently and rationally I can now think about my future. Prior to this program, I would avoid thinking about life after college at all costs. It stressed me out too much, basically because I had no idea what I want to do. I can't say that I know any better what I want to do, but I can say that I've learned to face the future with a lot more confidence and with a better attitude. Graduate school no longer seems like some distant idea for really old students who are too scared to enter the real world. I've learned that it's a solid path which can lead to a lot of really awesome directions, and definitely something I will consider. I'm also thankful for this amazing introduction into the world of HCI. I know that if I go to graduate school, HCI is most probably the direction I'd like to take. So I'd say, this is probably the most productive, challenging, enriching summers I've had, and I can't believe that its coming to a close.

In other news, finished the poster! Only the paper left! ahhh!

July 30

Posted on [July 30, 2013](#) by [llitwin](#)

Another day of data analysis and paper writing today. We had a good meeting with our mentors, and were able to discuss a lot of our findings. We have some interesting conclusions, and a lot of questions which can only be answered with future research. Still, it feels really cool to be at this new (and last) stage of our study.

We also had a luncheon lecture with Pam. She gave us some more information about the grad program here, which was helpful. I guess its easy to forget that the grad students have classes and a structured program that they are a

part of. I also was impressed by how rapidly growing the graduate program is at VRAC! HCI is definitely going to be a big part of the future...

Last Monday at VRAC

Posted on [July 29, 2013](#) by [llitwin](#)

Its our last Monday at VRAC, but stress is pretty high as we all work to analyze data and finish our posters. I'm relieved to be done with user studies (thanks to everyone who participated!!) and happy to be looking at our results. While we did not get the results we wanted exactly, there's still stuff to talk about and definitely ways to continue and enhance this research.

In this last week, I'm probably going to be reflecting some, and thinking about the could-haves and would-haves. One thought I had today: Our team initially had (ridiculously high) hopes of conducting our investigation of cybersickness in the C6. Imagine running through the maze in there! ahhhh!

July 26

Posted on [July 26, 2013](#) by [llitwin](#)

Yay Friday! This weekend won't be the most relaxing of weekends, due to the number of studies we are hoping to run. We also are trying to fit in some data analysis and paper writing as well. Still, I'm happy its the weekend and sad at the same time! We only have 4 more "normal" days in the lab, guys!

This mornings journal club was interesting. We discussed an article about the development of a haptic glove for students who are blind or visually impaired. Our guest speaker was an HCI grad student who is blind himself. He had some major issues with the article, most of which we had all failed to notice initially. Every topic is so multi-faceted, it makes such a huge difference when you have people personally experienced in it, as well as academically knowledgeable.

July 25

Posted on [July 25, 2013](#) by [llitwin](#)

I'm sitting here while Kelli is running a participant through our study. We've definitely gotten the hang of running this thing, and simply rotate roles each time. Also, Kelli is amazing and got all of Chad's REU to participate, so we have a solid number of participants who have not heard everything about our study (unlike our fellow interns...)

Not much else to report on, I'm eager to get our results so we can do some super quick data analysis and finish up our poster and paper. Right now I feel slightly behind, but its somewhat out of our control at this point. I also am looking forward to this weekend. Even though a good chunk of it will be spent running user studies, I really want some time to get a chance and explore parts of Ames that I did not get to see yet. (Anyone want to go to Reiman gardens with me at some point...?!)

July 24

Posted on [July 24, 2013](#) by [llitwin](#)

I tend to always talk about how time is moving for me. And woah, this week is going by fast. I think August 3rd is going to get here in no time, and it'll be pretty sad to leave everybody here! We had more user studies today, and I think we pretty much perfected all the kinks. We also are making progress on our paper and poster, so everything is suddenly a bit less stressful and more exciting. We had the etiquette lunch today too. It was fun, especially because the food was delicious and I was required to eat slowly and with small bites, so that it lasted for longer and I could

maximize my enjoyment. ☒

User studies and grad school

Posted on [July 23, 2013](#) by [llitwin](#)

We (finally) started our user studies today! There were a few glitches here and there, but mostly went well. It's pretty tiring repeating the same thing over and over again, but it's equally exciting and feels like real research! I'm sort of stressing out about how we'll finish our poster and paper in time, since we really want to get a good number of participants so that we can aim for some significant results. That means that this whole week we have booked back to back studies, but also need to find time for some data analysis, writing, and sleep!

We had a luncheon lecture that really reminded me of the lectures that began junior year of high school, preparing us for college. This time, though, we were being prepared for grad school. It seems like an equally long process, but definitely manageable if I stay organized. I still don't know what I want to do and when and where. Being here, and hearing all the HCI/grad school talk, it definitely makes me want to head to some HCI grad program somewhere. But I think that as soon as I head back home and to school, I'll hear a lot of different options that will sway me in another direction all together. Still this summer has forced me to think about the future in a level headed manner. I'm not overly stressed about it, only excited to explore the academic world and figure out what I want to do (...kind of cheesy, sorry!)

Updates from the last few days

Posted on [July 22, 2013](#) by [llitwin](#)

It's been a busy past few days, with barely any time to sit and actually blog!

On Thursday, we spent the entire day in the conference room, doing a Google Hangout with REU sites at Rutgers and UPENN. Their research was interesting and it was cool to "meet" other REU students in similar disciplines. At the same time, however, it was a very long day and I felt like a lot was lost in their presentations when we couldn't actually see the presenters, we only could see their slides. Still, I enjoyed listening to their research and it made me feel really lucky to be here. There weren't really any other projects I would rather be working on. Yay cybersickness!

On Friday, we went to Des Moines. First we met with a user study professional at Principal Financial Group. It was interesting to hear about the business world and see the insides of a typical office building. The amount of time and space they dedicate to user studies was surprising, but pretty cool. It's important to have a usable website and telephone operating system. Afterwards, we had a nice lunch at Panera and headed to the science center. We were all pretty hilariously excited about everything, and the "behind the scenes" tour was a lot of fun. A museum seems like an awesome place to work too! There was so much energy and excitement there, and a chance to really delve into science or just enjoy the exhibits at a more trivial level.

On Saturday, we went to the Omaha zoo! It's definitely a huge zoo, with so much to do and see. I think everyone had a great time and bonded throughout the day. With our entrance into week 9, we are all getting more sentimental as this summer comes to an end. I'm looking forward to a busy, fun, and crazy next 2 weeks!

July 17

Posted on [July 17, 2013](#) by [llitwin](#)

Not much new here. We've almost finalized our entire study. Almost everything is checked off on our list. But we have to wait to hear back from the IRB before we can actually get started. It means that next week will probably be an extremely busy week: running studies while writing the paper while finishing our poster while analyzing data. The list goes on...

In other news, it looks like I'll be continuing HCI research into the school year! There is an HCI lab at Tufts, and I emailed the professor asking about joining as an undergraduate. He invited me to one of their lab meetings in the fall so that I can meet grad students and see what I want to do. His lab focuses a lot on brain-computer interaction using functional near infrared spectroscopy (fNIRS) brain data to adapt the user interface in real time. I don't exactly understand what a lot of this means, but I look forward to learning more, and I hope it will work out with his lab! I always knew I would be doing research in my senior year at school (its a requirement for my major). Before this summer, however, I had no idea which lab I wanted to work in. I'm pretty happy to have more direction now and I'm excited to take all I've learned here back with me to Boston!

The world of research

Posted on [July 16, 2013](#) by [llitwin](#)

Life at VRAC has been somewhat rollercoaster-y in the past few days. Things are definitely not going as planned, and we are encountering many obstacles every day in getting our user study up and running (IRB stuff, head tracking stuff, slight Unity stuff, etc.) We've been told repeatedly that this is what research is like, and I guess I am starting to believe it, considering the endlessness of our issues. I was initially pretty disappointed when all these things kept going wrong, but I guess I've come to some sort of inner peace or acceptance or something. Other teams are also running into some unexpected obstacles, which convinces me even more that these things happen pretty often at VRAC and in the research world. So even though not everything (nothing?) is going as planned, we have a solid experimental setup, and awesome mentors who are really helping us make the most out of this experience.

July 15

Posted on [July 15, 2013](#) by [llitwin](#)

I cannot believe we are already at week 8. Now that we are finally about to start our study, I wish we had even just one more week to make this a really successful experiment. This final crunch will be difficult and stressful, but I'm excited for things to be rolling. In the past week, my group has really become a team. We each divided up different parts of coding for the study, and now have put them all together and finished working out kinks. We are communicating well, and having fun too. Its a pretty drastic change from the first few weeks, when I think we were all a bit unsure of how to put all our ideas together and form a cohesive team. I'm happy with the progress we've made, and looking forward to these last weeks while we finish up our study together!

July 12

Posted on [July 13, 2013](#) by [llitwin](#)

Oops! Friday was such a crazy day, I forgot to blog! We were planning on doing a dry-run of our study, seeing what works and what doesn't and making necessary adjustments over the weekend. Unfortunately, we are somewhat behind in our work and still have a few technical issues to work out. But we did get an incredible amount of work done in one week. I hope that we can do the dry run this weekend, and start studies next week. Soon we'll be recruiting all of you, so be prepared!!

Aside from that, the whole "go to grad school" mantra has really started to get to me. I find myself researching grad programs and GRE information pretty regularly all of a sudden. But I am not sure if this is simply a result of everyone talking about it so much that I want more facts, or if I actually am seriously thinking about pursuing this path. I've done equal amounts of research in so many other fields (medical school, education stuff, etc.) I think I may be on of the most indecisive people on the planet. Anyways, I look forward to continuing the conversations and seeing what input all the knowledgable and experienced VRAC people have for us in the next 3 weeks.

July 11

Posted on [July 11, 2013](#) by [llitwin](#)

Happy Birthday Francely!!!!

This week has felt really long for some reason. It's probably a combination of coming back from a vacation and the day at John Deere in Waterloo yesterday- its simply an atypical week. John Deere was pretty neat. An image that really stood out was the rows and rows of cubicles in the product engineering building. I had always heard of the cubicle working environment, but I had never seen it in real life, only in movies and TV. Honestly, it seemed pretty terrible to me, and I don't think I would ever be able to work in that environment. I feel really fortunate for VRAC and the work environment in the lab.

These past few days have also been very full of "future talk"- that is, talking about grad school and our futures. I know its important to think about, but I am the kind of person that postpones making these types of decisions for as long as possible. I currently have 3 majorly different paths I could take, and I switch between what I want everyday. Regardless, its important that everyone at VRAC is making me think about this stuff and realize what an important crossroads I am at now. I am looking forward to everything (aka my life) being figured out soon though! These decisions (or at least, thinking about them) can be so stressful.

July 9

Posted on [July 9, 2013](#) by [llitwin](#)

Today was a pretty normal day at the lab. Its pretty crazy to think about where we were 6 weeks ago, not really knowing what we are doing or how to occupy ourselves when there wasn't any structured programming. And now, I am staying at the lab late trying to get all my work done for this week so that we can start our user study by next week. We had a really productive team meeting today, and figured out the basics of our experiment and got some very helpful tips from our faculty mentors.

I'm looking forward to John Deere tomorrow! It's really awesome how this program incorporates so many fun and cool things and makes us work so hard and learn so much.

The long weekend

Posted on [July 8, 2013](#) by [llitwin](#)

I left VRAC on Wednesday feeling pretty defeated- I was tired and ready for the break after a long day of very little productivity. But the long weekend completely rejuvenated me! Even though I did not get much sleep and we spent long days out in the sun exploring the midwest, the break from VRAC was exactly what I needed. I came back today, fixed the issues I was having on Wednesday (thanks Curtis!!) and feel really accomplished with how much I got done in our obstacle maze.

A few highlights from our adventures this weekend:

-Wednesday night, we were racing against the clock to get to our campsite before the locked the gate at 10 pm. Even though we arrived at 10:15, we got incredibly lucky and the owners were back at the campsite unlocking the gate for a factory worker who had been locked out. If we had not arrived when we did, we might have been sleeping in the car or waiting for several hours for the gate to be unlocked. It was a good start to the weekend!

-We got a tip from a local to visit Matthiessen State Park instead of Starved Rock state park, as we had planned. It was gorgeous and really muddy- made for an awesome mix!

-Unbeknownst to us, Redbud, the national motorcross competition, was being held right next to our campsite Friday and Saturday nights (in Buchanon, MI) This made for some pretty entertaining (and loud) neighbors, and an introduction into a world of motorcross I never knew existed. They were racing until about 3 or 4 AM Friday night!!

-A friend of mine from Tufts, whom I had not seen in a while, joined us Saturday night. It was fun to blend the REU world with the Tufts world, and see how well everyone got along. We even managed to fit 6 people into a 4 person tent!

All in all, a great weekend, and a wonderful way to start the last 4 weeks at VRAC!

July 3

Posted on [July 3, 2013](#) by [llitwin](#)

I don't think I've ever looked forward to a Wednesday until now. I guess it's really a Friday, but still, I'm ready for a break no matter what day of the week.

This morning was great- I was really impressed with all our presentations. Even more so, I appreciated how all the interns took these mid-summer oral presentations very seriously. We easily could have blown them off and just improvised on the spot. But it really makes a difference when people practice and prepare and practice some more. It definitely says something about the type of students we all are, as well as how seriously we take every task. It's probably why Stephen came by and said we are the best REU group ever (okay, maybe I'm exaggerating a little, but it was along those lines....)

After the presentations my team got working on our obstacle maze task in Unity. Yesterday things were going pretty well and we were figuring out the program without too many difficulties. Today things are a lot worse. I think I'm still missing some basic understanding of the program, inhibiting me from getting it to do what I want. I hope that come next week we'll get some help from our grad mentor and be back on our feet. For now, though, I'm looking forward to the break and the camping trip we've organized. I cannot believe that once we get back (July 8) it will be week 7! This is one of the fast moving summers I've ever experienced.

Another day at VRAC

Posted on [July 2, 2013](#) by [llitwin](#)

Today was spent primarily practicing our presentation. I think we worked really well as a team, and I'm happy with how everything turned out. Tomorrow will go well, I hope. We set a date for the first day of our user studies, so until then, we have a lot of work to get done. It means that next week we'll probably be spending loooooonngggg hours at VRAC. But it'll be worth it in the end, and I'm glad we have the weekend to rest up and prepare. We have a good tracking device and some helpful graduate students, as well as our brains to figure out how to implement a tracking system into Unity3D. Now if only the Oculus Rift would get here, life would be just so nice...

July 1

Posted on [July 1, 2013](#) by [llitwin](#)

Time goes by so quickly here! The weekend went by in a flash, but it was a lot of fun. Saturday we spent the morning at Ledges State Park, which was so much more fun than I anticipated (no offense to Iowa state parks...) The scenery was really green, with some cool sandstone rock formations and awesome, short trails. I also really liked the way they allowed the creeks to go over the road, allowing kids (and us!) to splash around in the water. So much more fun (and efficient) than building bridges for cars to drive over.

We also had our first ethics class with Eliot today. He went over some pretty interesting ethical dilemmas, many of which I'm not sure what the right choice is, and I'm glad I'm not planning to pursue a law degree. He asked us whether we'd work for the tobacco industry, even if we were given a company car and a \$200,00 salary. I continuously said no. I acknowledge that I'm extraordinarily fortunate to have the option of considering my morals over money, even in a hypothetical situation. I also acknowledge that this would be a difficult choice if I were to actually come by a similar decision in the real world. Regardless, by working for a company, you are representing them. And for me, to represent a company who uses aggressive marketing techniques and has a history of corruption would not really be worth the money. So yeah, that's why I kept my hand up.

Unite over unity

Posted on [June 28, 2013](#) by [llitwin](#)

So with our lit review and methods pretty much completed (though of course they'll be edited more and more until they're perfect) we've moved on to really getting a good idea of unity, the 3D game engine we'll be using to program our game/task for the user study. It's pretty fun at this point, and I'll probably go home and try and work on it more. Curtis, our grad mentor, gave us some really good tutorial videos, with a guy and an awesome accent, so that's made it fun too. Unity also uses javascript, which is a really useful language, so I'm happy to have a chance working with it and expanding my knowledge.

I'm looking forward to the hike tomorrow! Paul mentioned something about walking through part of the Des Moines River, and I love water hikes, so that will be fun! Looking forward to a relaxing weekend and then a super productive 3-day week :)

June 27

Posted on [June 27, 2013](#) by [llitwin](#)

This week, even though we have more to do, there suddenly feels like less to talk about. I guess its because we've been working on pretty much the same thing for a few days now. That is, our lit review and designing our study. Part of me wishes we were focusing only on the actual study right now, as in coding our maze and mitigation task. But I know it will be nice to have most of our paper written by the end of the 10 weeks. Still, it feels like a chore we have to get out of the way before we can focus on the real deal stuff.

We also just practiced our presentations with Lisa. It was really helpful and forced us to start thinking about them now, and not wait till Monday. I also realized this is the first time the different research groups have been given a formal opportunity to explain their research to one another. I hear about what everyone is doing on a day to day basis, but I liked that this provided me a more focused understanding of why and what each group is doing what they are doing. I'm looking forward to the presentations next week to hear an even better presented and more detailed explanation from the groups!

...and I guess I did find stuff to talk about!

Thai food!

Posted on [June 26, 2013](#) by [llitwin](#)

Everyone has written about how excited they are about thai food, and I'm jumping in on that too! At home I probably eat thai food at least once a week, so its definitely been something I'm craving.

Today was pretty relaxed, even though we have a lot to be doing, its all we have to be doing, so its not that hard to

sit and focus on getting stuff done. I'm getting prepared/slightly anxious that all of next week will basically be spent coding our task for the user study. But it will also involve some Maya modeling and design aspects that I think will be fun. And also (hopefully, if we get it working...) will involve playing with and using the HMD, which is even more fun! Besides that, still have a lot of writing left to do for the lit review and methods section.

June 25

Posted on [June 25, 2013](#) by [llitwin](#)

With such a structure-less day, I am almost forgot to post! Today was spent primarily working on our lit review, so that we will have time to play with Unity3D and the HMD the rest of the week. It's about to be major crunch time, since we have to start running our experiment really soon, and are only getting started on programming. I'm really happy that I've been consistently going to the gym, otherwise I think the stress would be getting to me and life would be a lot more difficult. But I'm staying positive and I think our group will succeed.

I'm looking forward to Thai food tomorrow, definitely one of my favorite cuisines! And it will be a really nice break from working in the lab!

Week 5

Posted on [June 24, 2013](#) by [llitwin](#)

It's week 5, and things already feel different in the first few hours of this Monday morning. We arrived at 9am and there was no one waiting for us to begin a class. Everything suddenly feels a lot more research project oriented, as my group spent that free hour doing more research for our lit review. We also had a good session with Stephen, preparing for our oral presentations next week. The scaffolding they kept telling us about in the beginning of the program is definitely starting to loosen, but it feels good, and I'm excited to make progress with our research project. Luncheon lecture with Rob West was also really interesting. It was a lot of stuff I am more comfortable with, so it felt nice and familiar, reminding me of classes at school.

The weekend was fun too. Des Moines seems like a really nice city, I wish we had more time to explore all around. The farmers market was awesome, so so big, and nothing like what I was expecting. The rest of the weekend involved a lot of sleep, and also some research and modeling.

4th week and google glass

Posted on [June 21, 2013](#) by [llitwin](#)

Its the end of our 4th week here, and time is such a weird thing. Days go by like weeks and weeks go by like days. 4 weeks have gone by so fast, and I've gained a lot. Particularly, a solid review of C++, the basics of graphics in OpenGL, and now a pretty solid understanding of Maya. I'm having a really good time, and appreciating a lot of the experiences we are gaining. Like others have mentioned, I am still a bit restless when it comes to making progress on our research project. But I hope that once we a freer schedule next week, the pace will pick up and our productivity will soar!

We got to try out Google Glass today, which was really exciting, after all the hype it has gotten in the news and stuff. It was pretty cool, but I'm still unsure of how necessary it is, and still somewhat weirded out by the whole idea.

June 20

Posted on [June 20, 2013](#) by [llitwin](#)

Progress is slowly coming along in terms of our cybersickness research. Today we toured Jon Kelly's lab and he

showed us his HMD's and we tried the demo. It was pretty cool to finally have the opportunity for a hands-on interaction with what we'll be using for the rest of the summer. We're on our way to figuring out exactly what we want to study, and the tasks we will have participants doing in the virtual reality.

Still working on Maya stuff too. I had less time today, so my Cogworth, to go with Lumiere, is not complete, but below is what I managed to do in the little time we had today.

Maya!

Posted on [June 19, 2013](#) by [Ilitwin](#)

When I was younger I used to beg my parents to change my name from Liat to Maya. Maybe now I know why... I'm obsessed with modeling in Maya autodesk!! I think this is where the perfectionist in me comes out, as I've spent most of the day working on my model of Lumiere, from Beauty and the Beast. It means I have a lot to catch up on for our research project: more reading, learning python, figuring out how Unity works, figuring out a task for our study on HMD and cybersickness, etc. Still, today was fun and I feel accomplished and pretty comfortable with the Maya software.



Dinosaurs and Robots

Posted on [June 18, 2013](#) by [Ilitwin](#)

Yesterday we went to the water park near our apartments, and had a really good time! The water slides were fun, and then we continued to play water basketball and had an awesome, although somewhat aggressive, game!

Today Connor spoke to us about his research with robots. I thought the developmental psychology aspects were really interesting. Teaching a robot how to think, rather than just feeding it information, makes it a lot more powerful (and impressive) in my opinion.

I'm liking the maya class too! I honestly could spend hours just playing around and working on the assignments, but obviously have to also get to work on our research. There have been exciting developments on that front, so I'm a lot more motivated to read and learn about the various factors of cybersickness in head mounted displays.

Below is my dinosaur. Its kindof weird looking, but was fun to create! Its pretty cool that it just started out as a basic sphere and turned into this.



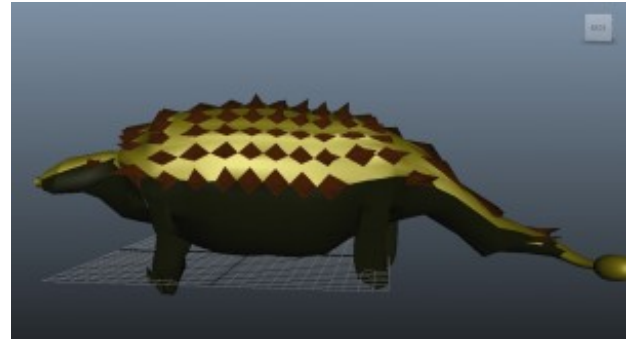
Snow in June?

Posted on [June 17, 2013](#) by [Ilitwin](#)

It's somewhat ironic that we are designing snowmen on an 80 degree sunny day, a few hours before we will be going to a water park in true summer fashion. Regardless, Maya is a lot of fun, and I'm enjoying playing around and discovering new tools. The furry scarves/hat were especially fun!

The weekend was nice and relaxing, although Sunday was spent creating our bop-it game for over 7 hours. I'm really happy with the product though, I didn't think we would be as successful as we actually were, considering the difficulties with OpenGL initially. Skyzone was fun, and trader joes was great! I stocked up on a lot of my favorite items to cook for the next few weeks ☺

On the cybersickness front, we submitted our IRB proposal on Friday. Now I just want to get the surveys and interviews done and actually start the real deal research stuff. Still, I'm really happy to have had the experience of writing a questionnaire. Its surprising how many edits we needed, and how necessary it is to consider the phrasing of questions and how to get the best results



June 14

Posted on [June 14, 2013](#) by [Ilitwin](#)

Its Friday! This week went by so fast! A lot was going on, it was almost too hard to keep track of everything. OpenGL was a bit of a roller coaster, but hopefully this weekend my team and I will manage to create an awesome bop-it game. The review yesterday in class was really helpful. And like David said, Sebastian's slides were among the most aesthetically pleasing and clear set of slides I have ever seen. Research has been also a bit of a roller coaster- we thought we had our idea down, and were really excited about using EEG's in our investigation of cybersickness. Unfortunately, our mentors thought we would be wasting too much time on hardware and technical difficulties, and it wasn't worth it in a 10 week research project. I'm disappointed, especially since we didn't really have any back up ideas that I am as excited about, but I hope we come up with something more concrete soon. I'm starting to feel like all the other research teams are actually *doing* stuff, while we are still in the preliminary stage of figuring out what to do. Regardless, I am happy its Friday and that we'll have a weekend to brainstorm, recoup, and come back on Monday rejuvenated.

June 13

Posted on [June 13, 2013](#) by [Ilitwin](#)

The HCI class yesterday was really enjoyable. I'm starting to get a much better idea of what I'm interested in specifically, within this wide discipline. I really like the user interface/design aspects, and how they can be explained with basic psychology and perception aspects of our brains. We tend to always have an instinct of what looks better, but why do we think that way? and is it different for different people? Anyways, I'm really grateful to have been exposed to HCI and have a better understanding of my own interests and how they can be applied in the academic and industry worlds.

Light painting yesterday was also so good. I think we were initially all feeling a bit tired, stress, and unexcited, only because we wanted to be asleep rather than walking all the way back to Howe Hall. I was really happy, however, to see how the group was able to lift each others spirits quickly and have a successful batch of awesome pictures created with the light effects!

Cybersickness team feeling a bit color-sick...

June 12

Posted on [June 12, 2013](#) by [llitwin](#)

With the problem area paragraph due date looming, my team has begun discussing how we can narrow down our research. We are considering using EEG (Electroencephalography) and recording electrical activity along the scalp while participants are experiencing cybersickness. Most of the articles we had read thus far primarily focused on self-reported data in order to measure cybersickness levels. Hopefully, by using EEG, we will be able to obtain objective data and identify what is happening when users feel sick in virtual environments. Of course, this requires a whole new round of research, but I'm pretty excited about this. I'm happy to be able to tie in my background in cognitive science into the research we will be doing!

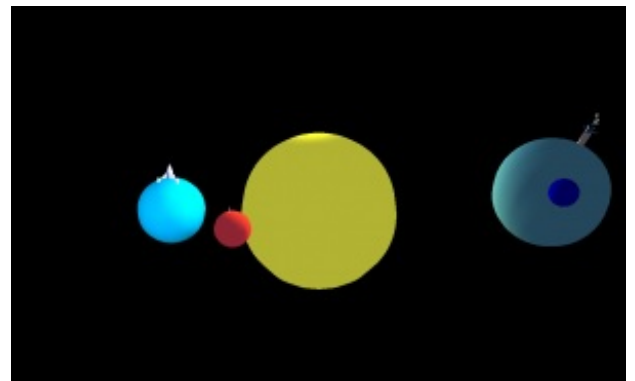


On another note, I (somehow) got lighting to (kind of) work in my solar system program. I also got a rocket on Venus and some flowers on Earth! OpenGL is pretty frustrating though, I'm not sure how our team is going to be able to create a bop-it game in 1 weekend, on top of all the other work we have for our research teams. I guess this is where the stress begins... Still, I've had enough time to go to the gym plenty (I can barely walk my legs are so sore) and also relax and even sleep enough!

Cook-out and planets

Posted on [June 11, 2013](#) by [llitwin](#)

Last night we had a really fun cookout. Its normally pretty hard to get a group of 14 people to have one conversation over dinner, but we each went around telling stories, and came up with some ridiculous nicknames for one another. This morning, I struggled a bit with OpenGL, but I really appreciate having assignments that are pushing our limits each day. I want to make my solar system really pretty... But first I have to make those planets rotate properly, oops ☹️



Our research project is coming along. We finished drafting a survey to send out to VRAC members about their experiences with cybersickness, but now may also add some specific questions dealing with videogames. I never play video games, so I don't really identify with this as a problem area, but I guess I understand the need for some more research into this area. I still feel a little bit overwhelmed by how vast the whole area of cybersickness is, and have no idea how my team is going to find a way to narrow down and choose just one thing to research. Hopefully our survey will point us in the right direction.

June 10

Posted on [June 10, 2013](#) by [llitwin](#)

I'm really excited about working with OpenGL. Part of what drew me to the discipline of cognitive science/HCI etc. is my interest in graphic design and user interface. I've done graphics with java swing and Java3D, but so far openGL is a bit more confusing. Still, it was fun to draw my name and work with the different primitive shapes this morning.

This past weekend was nice too. I'm happy I got to sleep a lot and rest up after a tiring week. I haven't had such a regular routine of being somewhere 9-5 since high school, so this is a bit of a change. No more naps in between classes like I'm used to in college-welcome to the real world! The REU picnic was nice, although I kindof expected them to have some more organization. I would have enjoyed hearing which REU's were there, and what research they are doing. It was fun to be introduced to a beautiful park that is literally in our backyard though!

Research and c++

Posted on [June 7, 2013](#) by [llitwin](#)

The 'Craft of Research' session yesterday was cool. I like that all the mentors and everyone at VRAC are really walking us through the world of research- asking questions on the way and evaluating the importance of what we are doing. It makes reading articles, be it for cybersickness or journal club, a better experience as we can apply this knowledge to what we are reading. My group is about half-way done with our blackjack game, which has been fun to code. There has even been some discussion of implementing ascii art to compete with some of the other teams.... 😊

Lunch today was fun too, lots of goats and cows, skrillex and T-swift. We are all definitely getting closer, looking forward to the next 8 weeks! <http://www.youtube.com/watch?v=NFgx5MY72Dk> <3 <3

luncheon lectures!

Posted on [June 6, 2013](#) by [llitwin](#)

I think luncheon lectures are quickly becoming one of my favorite parts of the week- food and interesting discussions all at once!? Nik Karpinsky was super energetic and totally in love with the work he does here (3D imaging stuff). I definitely have been that passionate about various projects in my life, easily working 70-80 hours a week on something. But I cannot imagine ever continuing that passion for so many years, and constantly coming up with really cool and new things to show to the world! Obviously the things I obsess over are of very little significance and usually only last one week. I hope to one day be able to find an academic interest that gets me so jazzed, and something that I'm good enough at to actually be successful at. I couldn't believe he got a patent while a masters student, and basically developed a whole new way of getting 3D images. Pretty cool!

Okay, back to work... (C++ assignment, project, journal club article, cybersickness articles, the list goes on and on!)

Exciting routines and C++

Posted on [June 5, 2013](#) by [llitwin](#)

We've really fallen into a routine now, which is pretty exciting. Okay, that sounds like an oxymoron, but its not. Let me explain: even though the word 'routine' implies boring and monotonous, its cool that what was one week ago scary and overwhelming, now feels comfortable and regular. Crazy what a difference 1 week makes.

We're balancing working on our C++ project (yay blackjack!) and continuing research for our projects. A week ago, I think we were all sort of bored and unsure what to do with our time. Now, those concepts are pretty foreign... so much to do!!!

6/4

Posted on [June 4, 2013](#) by [llitwin](#)

Yesterday we had the opportunity to catch on some reading for our research project. I initially thought cybersickness was a pretty small discipline and that not too much research has been done in the field yet. But I was so wrong. Turns out there is an annual conference dedicated to the study of cybersickness, as well as tons of papers, dating back to the 1970s even, on the topic. So we clearly have a lot of reading and learning to do. I'm looking forward to having a more clear idea of what exactly we will be researching and how we'll be doing that.

The luncheon lecture today was also really enlightening. I still have no idea if I want to go into industry or research or something else entirely. Kind of nerve-racking, but also exciting, to know that there are so many directions I can take from here.

How is it already June??

Posted on [June 3, 2013](#) by [llitwin](#)

Time has been flying by recently, I can't believe it's already June!

Friday we had our first journal club. I really like that these are included in the program consistently throughout the summer. It will be really good to gain more knowledge about different aspects of the field, as well as identify some of the key researchers and universities where they are coming out with the most avant-garde research. On Friday we also discussed the Myers-Briggs test, as well as participated in ARG training. Both activities worked really well as precursors to the ropes course on Saturday, as we were already pretty far into team-building just by discussing these issues in the lab.

Saturday was a lot of fun, especially the swing! We worked well together as a group, and I think it helped that we each had a better understanding of one other simply by having already spent a few days together (and seeing each other's Myers-Briggs results). Looking forward to the rest of the week, it will be fun to make a game with C++

3 days, 3 observations

Posted on [May 31, 2013](#) by [llitwin](#)

Today starts the 3rd full day here at Iowa State. In commemoration, 3 observations/reflections thus far:

1. There are some crazy cool virtual reality technologies on this campus. For instance, the C6 yesterday was incredible. The technology, research, money, and time that goes into projects like that truly demonstrates the dedication and enthusiasm researchers in this discipline and at ISU have.
2. Cybersickness is a thing, and it's actually an issue that needs to be solved so as to increase productivity and usability for these virtual realities. I was initially somewhat skeptical of my research project- is cybersickness actually that big of a deal? But after hearing from Dr. Dorneich and Curtis, I am really excited to work with my group and address the reasons behind this problem and methods to mitigate it. And it is a big deal!
3. This campus is huge and really pretty. There are even swans and a lake!

The beginning

Posted on [May 30, 2013](#) by [llitwin](#)

I've never kept a blog before, so we'll see how this goes, but here's my first try:

It's been a busy few days, but in a good way ☺ ISU campus is huge, but really pretty and lots of places to explore. The other interns are all really great, its been fun getting to know everyone. I'm really excited/nervous for the research we'll be participating in. The orientation yesterday helped me understand better what VRAC is, what is expected from us, and what other grad students do here. But I still am eager to know what we'll actually be doing in the research sense. Looking forward to learning more and getting better orientated today!

Okay, that was pretty boring, sorry! I anticipate that as I get more comfortable here, these will (hopefully) get a lot better, funnier, and more interesting.