

Briana Sobel

 projects.vrac.iastate.edu/REU2016/people/interns/briana-sobel/

8/5

Posted on [August 5, 2016](#) by [bsobel3](#) August 5, 2016

Welp, last blog post of the summer. It's such a bittersweet ending. I'm sad that it's over but it also has me excited for the future. I took a look at my first post from the summer to compare. My feelings for the summer was "extremely overwhelming but incredibly excited" and I can say now that I could not have been more right. I also said that I felt "so young and inexperienced" and in that case, I could not have been more wrong. I also put "p.s. I may or may not be drinking too much coffee" and I just have to stop and laugh at that naive me from 2 months ago. This has been a spectacular summer, one that undoubtedly will shape me for the rest of my life. I would not have traded this for anything.

I am going to miss the people here. They say some people come into your life for a reason, some only for a season. Well, they may have only been here for a season, but they were definitely here for a reason. Every one of these people has impacted me in some way. We may all live miles apart, but we will always have this connection between us. Peace out SPIRE-EIT 2016. Go and be magical.



8/3

Posted on [August 3, 2016](#) by [bsobel3](#) August 3, 2016

Now this really is the home stretch. Our poster is finished and printed. Our paper is pretty much done (and pushing 30 pages). After practicing and working on our internal presentation PowerPoint for about two hours yesterday, we found out there was no presentation and that we were just going over our poster. So that is happening in a few minutes. Everything is wrapping up nicely, all we have left is our exit interviews and our poster symposium tomorrow. I'm excited to go home, but will definitely miss this mess of crazy weirdos.

8/1

Posted on [August 1, 2016](#) by [bsobel3](#) August 1, 2016

Oh my gosh, it's August. wut.

I spent most of the weekend working on the results of our study. There was just a lot to go through. Through a great amount of teamwork, we were able to pull a fantastic poster together today which we just submitted. Hope everyone at the poster session on Thursday is ready to get rekt. All that is left is our paper (currently 25 pages) and a final, internal presentation. Home stretch everybody.

Super excited to be home in a week, but I will miss this group. Such an interesting cast of characters. Some tensions are running high currently, but we were all able to have a fun evening together on Saturday. Team CA is going strong. Stellar. Out of this world. The sky's the limit. Shoot for the stars. *insert more space related puns here*

7/29

Posted on [July 29, 2016](#) by [bsobel3](#) July 29, 2016

Yesterday we had a team meeting on how to go about analyzing our data. This morning I spent some time getting on that. We had our 'elevator pitch competition', which I ended up having to do without my partner because she was collecting data for her project. I think it went pretty well, and we'll see who the 'winner' is some time next week.

Only one week left. I'm gonna miss these guys!

7/28

Posted on [July 28, 2016](#) by [bsobel3](#) July 28, 2016

Yesterday we ran 3 participants. Today we have one. We are starting to figure out how to analyze all the data. Whether it will be significant or not, we have gotten some good responses from each of the participants.

Today we had a grad student panel for luncheon lecture. They told us about their experiences in grad school. Something they talked about was taking those few years off in between undergrad and master's/PhD to work in industry. There is a lot to take into consideration, but it is definitely exciting to have so many options!

7/27

Posted on [July 27, 2016](#) by [bsobel3](#) July 27, 2016

WE HAVE DATA!!!! We ran Brian as a participant last night which took about 3 hours, and I ran Erik today which took about 2. Shout out to Brian for being a real trooper, hanging in there through all of our technical and procedural difficulties, being patient and giving us fantastic feedback. And shout out to Erik for only taking 2 hours.

This morning we had an ethics session with Eliot. I had to leave early to prepare for the experiment, but the hour I saw was really interesting. He gave us the dilemma based on his own experiences, where we were a software company deciding to sell an unfinished product to a billion dollar corporation. He played the part of the intimidating CEO and we were all the tiny software engineers under his boot. . But, it was good experience, because the world of business is about having the confidence and tenacity to decisions on the fly while in the presence of powerful people. Situations like that invigorate me, one of the reasons my mom always said I would be a good lawyer. Also, I have heard from many people that my gaze is terrifying, which I feel can have some great perks in the future!

We are getting so close to the end. I miss my home in Atlanta.

7/26

Posted on [July 26, 2016](#) by [bsobel3](#) July 26, 2016

The presentation went well yesterday. The people from USC seemed to think that our project was interesting so that's good. Now we are really into the home stretch, all that's left is finishing our project. We are running our first participant this afternoon so here's hoping everything works smoothly

7/25

Posted on [July 25, 2016](#) by [bsobel3](#) July 25, 2016

All the days are starting to bleed together now. It didn't help that I spent most of the weekend working. Saturday, I cam into VRAC at around 10 and left at 4. Got myself a microwaveable lunch from CVS. But, got a ton of work done which was nice. I also had the whole lab to myself which was pretty relaxing!

Sunday I was waiting at the bus stop to go to church when Wisdom showed up and I found out that he was headed

to the same place. It was fun having someone to sit next to at church for the first time in months (besides when my parents were here)! Afterwards did a Target run and bought something other than pasta (*gasp*). Then team CA met to go over our presentation.

This morning we did a practice run of our presentation and it went really well. Our teleconference is in about 45 minutes and we're the first group to present. Get pumped.

7/22

Posted on [July 22, 2016](#) by [bsobel3](#) July 22, 2016

This morning we had a GRE prep session with Polly Gilbert which was really interesting. She and the student who was her assistant were super helpful, giving a lot of inside advice and tips. We were also given a packet of notes and an official practice book which I know will come in handy the next few years as I prepare.

We then had Journal Club where we talked about elevator pitches. These don't seem too hard, since we've basically been working on one these past 10 weeks. Also, I am pretty confident with speaking in front of a group and I know that me and my partner (the fabulous Sam) will be able to work well together.

This afternoon is another HCI class. This weekend holds a lot of sleeping as well as working on the research paper and poster. ~thrilled face~

7/21

Posted on [July 21, 2016](#) by [bsobel3](#) July 21, 2016

Haven't blogged in a couple days now (sorry mom). These past few days have been exceptionally busy, as I feel the next several are going to be as well.

We are getting so close to finishing our project. The CA interface is pretty much done. The scenarios are set. All we need is participants (which I feel will be one of the hardest parts). I've been working a lot on our research paper which is already 17 pages and going strong. We also have a project presentation on Monday with an REU at university of Southern California that we have to prepare for, which wouldn't be a huge deal except that Stanley is going to be gone most of the weekend. On the bright side, we all know plenty about the project that it won't be that hard.

Wednesday I went to a "How to write a personal statement" workshop. I found it extremely useful. I like it when writing prompts are laid out very straight forward. I also didn't know how personal your personal statement had to be. But with my notes, I feel like I could make a pretty strong one now!

Today we had a Luncheon Lecture with Dr. Rick Stone. It was interesting, but not entirely because of the content (even though welding is a riveting topic). Me and my psychologically minded self spent the whole time analyzing the speaker. He was just such an intriguing man, full of some sort of energy, dark humor, and a somewhat frightening amount of aggression. His voice sounded very 'frat-bro', but he was extremely smart and passionate about his research. He reminded me of some movie character that I couldn't place until Sam said "Mr. Incredible". So yeah, I met real-life Mr. Incredible.

This afternoon was Craft of Research and how to write a CV. It's something I'll have to get started on in the upcoming year. I also have to make a LinkedIn Profile, so get pumped for that.

After, I dragged June and Stanley into the meeting room to work on our Research paper. All of us were suffering from various degrees of exhaustion so it was only so fruitful. We worked on it for about two hours, then I went back to my apartment, fell into bed, and promptly passed out. After about an hour of rest, I made myself dinner and

dragged myself back to VRAC where I've been working on the research paper for about an hour now. Got a text from my mom as to why I haven't been writing blogs, so I decided to catch up while I'm waiting for the next bus. This is what we all have to look forward to in grad school!

p.s. here's a picture of what I have to deal with on a daily basis. Team CA for the win.



7/19

Posted on [July 19, 2016](#) by [bsobel3](#) July 19, 2016

Yesterday was a pretty interesting kind of day. We basically had a field trip into Des Moines, which I was initially not happy about because we had to miss a whole day of working on our projects. However, it ended up still being fun. We spent the morning talking to the User Experience lab at Principal Financial, a company that sells insurance. Their UX department deals with designing software to help people understand how to properly buy life insurance. What was interesting about this was that it was UX in the corporate world with people who didn't need much more than a Bachelor's degree. It has me thinking that industry really isn't off the table, which is exciting and terrifying at the same time. After, we went to the Science Center to play in all of the exhibits like the 19-21 years olds we are. But it reminded me how important places like this were, to show kids that science is fun and to stimulate their brains. I particularly loved their Maker section that allowed kids to use some tools to build things out of wood, and all of the people using the tools were girls #represent.

Today, our luncheon lecture with Dr. Daniel Spikes was extremely intriguing, especially during this time in our lives. He talked about race gaps in education, and how modern racism comes from an extremely long chain of events of oppression throughout many years. He also said that the most important thing that has to be done is to realize that not talking about racism doesn't stop racism, it perpetuates it. We have to not be afraid to talk about. I will never apologize for being white, but I do know that I had the opportunity to begin my life ahead of others, and I want to use that fortune to help everyone around me reach their full potential.

7/15

Posted on [July 15, 2016](#) by [bsobel3](#) July 15, 2016

Mostly more of the same, working on figuring out the prototype plus working on our research paper (which is a little over halfway done and already 15 pages).

Yesterday we had an ethics course with Dr. Winer. He mostly spent the time telling us how important it is to keep an open mind and to know when emotion can cloud your judgment. One of the things he talked about was the fact that the world is overpopulated and that we should reduce the population by 1/3 (aka getting rid of 2 billion people). My logic is telling me that it makes sense, my humanity is telling me that killing people is wrong, and my logical humanity is telling me that the problem of killing some people to help the rest is that you are saying that some lives are worth more than others, and there is no logical way to prove that's true. I guess that's what questions like that boil down to for me: what is the value of a human life, and are some worth more than others? I don't know, food for thought.

7/14

Posted on [July 14, 2016](#) by [bsobel3](#) July 14, 2016

I've really been enjoying the structure of these days, or more so the lack thereof. We really don't have anything scheduled, so the time is ours to use as we see fit. I've been getting a lot of work done, from half of our research paper to our prototype to our poster. It'll be weird to go back to school in a month and have actual classes.

Today our luncheon learn speaker was a PhD student in HCI. She talked to us about wearable technology and the WEAR scale she created to show the wearability of technology. It was a cool example of applied PhD work. Also, she was an independent contractor for a user experience company in California, another example of places that HCI can take you.

A running theme of this summer is "opening more doors than it closes" in that every time you solve a problem, four more pop up in its place. So is the life of a researcher I guess!

7/13

Posted on [July 13, 2016](#) by [bsobel3](#) July 13, 2016

Yesterday we had our group meeting to go over our prototype for our cognitive assistant. Thankfully, Dr. Dorneich said he really liked what it looked like, so we just had a discussion about how we wanted to do the actual building of procedures. It still feels like every time we answer a question, a new one pops up to take its place. But we are on the right track, which is something.

7/12

Posted on [July 12, 2016](#) by [bsobel3](#) July 12, 2016

This morning I spent a while starting to work on our poster, and if I do say so myself, it's look pretty amazing. I feel like June and I have a good system where she makes the template and I go in and add details. Today we are going over our unified paper prototype with Guliz and Dr. Dorneich and hopefully we can start coding the interface this week.

Our luncheon lecture was Dr. Gilbert, who is always fun to listen to. He talked about some of his previous projects, and the ones that have to do with measuring people's decision making strategies seem like it could potentially be useful for future work in our project. He answered a lot of our questions about grad school, and some of what it's like to work in industry.

I've been thinking about that a lot recently, if I should try to look for an internship or job in industry before grad school. As a psych major, it was completely off my radar because I just assumed no one would ever hire me. But with this REU experience under my belt, I don't feel like it's so far-fetched. I wonder if it would be fruitful to look for an internship next summer. But that would throw off my plan of doing research in order to stay in town for my sister's

wedding. And then after that, would I want to apply to grad school right away, or take a couple years to get industry experience (that could in turn help me get into a better grad program)? I just feel like it's too much to take into consideration, trying to both try to find an internship as well as try to find a graduate program. It'll be interesting to see where I am in 2 years.

7/11

Posted on [July 11, 2016](#) by [bsobel3](#) July 11, 2016

This is the first week we really have a ton of free time. No more deeper dive projects or course, just our main research projects. I spent the morning working on our experiment booklet, and June whipped up a very impressive poster template. We hope to spend the afternoon making a paper prototype for our CA interface.

We just got back from an Etiquette Lunch where we learned proper fine-dining. It was mostly review of what I learned in Cotillion. I forgot that Cotillion was a very Southern thing, so everyone else was kind of making fun of the fact that I had to do it. Also, with the way modern society is, super fancy meals like that are not very common. It reminded me of something out of Downton Abbey.

7/8

Posted on [July 8, 2016](#) by [bsobel3](#) July 8, 2016

"I am the one thing in life I can control" ~Aaron Burr from *Hamilton the Musical*.

I feel like every morning I wake up, it's to hear about another tragedy. It didn't it really hit until I saw a post from one of my friends from high school where she said that she actually feels terrified when she sees a cop car behind her. Public shootings make me feel like it's only a matter of time before it happens to someone I love, or even to me. Or even worse, it makes me wonder if I will be safe just because of my skin color. It just makes me so angry and outraged and I just feel so helpless. I feel like there's nothing I can do to solve this massive problem. I am the one thing in life I can control, which is why I choose to work hard in my studies and exude as much love as I can in order to combat the vast darkness that is encompassing the world.

An excerpt of Lin-Manuel Miranda's sonnet from the Tony's:

"When senseless acts of tragedy remind us
That nothing here is promised, not one day.
This show is proof that history remembers
We lived through times when hate and fear seemed stronger;
We rise and fall and light from dying embers, remembrances that hope and love last longer
And love is love is love is love is love is love is love is love cannot be killed or swept aside.
Now fill the world with music, love and pride."

7/7

Posted on [July 7, 2016](#) by [bsobel3](#) July 7, 2016

INTERNS – PLEASE MAKE COMMENTS ON OUR PAPER PROTOTYPES!!!!!!!

Yesterday the deeper dive presentations went pretty well. Everyone thought my landscape looked cool so that's a plus! All of the projects were amazing and just goes to reinforce how incredible the rest of the interns are. We got to vote on our favorite project and I tied for third out of seven, and I got a nifty mug for it!

I spent most of the morning going over the paper we're presenting for Journal Club tomorrow. I'll be happy when

that's over.

We made our paper prototypes and all we need is some comments on them. I'm trying to use passive (and sometimes not-so-passive) aggressive comments, but so far only Karo has given anything constructive. Well here's hoping we can get some more by tomorrow...

7/6

Posted on [July 6, 2016](#) by [bsobel3](#) July 6, 2016

We are almost done with Lit review and methods. Guliz says they're looking really good which is good to know! Our mid-project presentation (which we still don't know when it's due) looks fantastic thanks to the brilliant June. We are working on making paper prototypes of the CA system to get some feedback on.

My 3D printing project finished yesterday! It looks really good! We are presenting them this afternoon, and I'm excited to see how all the other projects turned out.

We had a program this morning on How to Apply for Grad School, which had some good information on it. It wasn't very specific, but my biggest takeaway was that I really needed to start doing my research because application time will soon be upon me (even if it is a year away).

7/5

Posted on [July 5, 2016](#) by [bsobel3](#) July 5, 2016

Wait, June is over? Julying.

This weekend my parents came into town which was a lot of fun, since they are just some very interesting people. I showed them around the campus and the lab, took them into Des Moines, went kayaking and hiking, saw Finding Dory and some fireworks. And they said there's nothing fun to do in Ames!

I have a feeling this week is going to be hectic. We are finishing our Literature Review and Methods writeup to then put it into a PowerPoint for our Mid-Project Presentation (even though we don't actually know when that is). We are starting to design the interface of our cognitive assistant. We are supposed to have a template of our final poster done (but there's no way that's happening). We have our Major Course Activity presentation tomorrow, and I don't know if I'm supposed to make a presentation or something. Currently trying to print a larger version of the Grand Canyon but the first attempt failed, so stay tuned on that. Plus, our group is presenting an article for Journal Club on Friday so we have another presentation to get done. So yeah, that's where we're at.

6/30

Posted on [June 30, 2016](#) by [bsobel3](#) June 30, 2016

Wow, been here a whole month. About halfway through. We can do this.

Yesterday we got to learn a little more about how to actually print things in the MakerBot. We also started figuring out our Deeper Dive projects. I asked about how to make the cool landscapes, and Alex connected me with Dr. Chris Harding who made an application that takes geographical data and transforms it into a file able to be 3D printed. It sounds really cool and I can't wait to try it!

Today we had a luncheon lecture with Dr. Young-A Lee who is an associate professor in the field of Fashion and Technology. She talked to us about current technological advances in regards to fashion and apparel, focusing on 3D body-scanning processes and how they can be used for merchandising. It's a pretty cool idea, but it seems like

their biggest hurdle is getting people to see it as a useful tool in their lives. The only reason people get the scans done is “for fun”, so they are trying to see how they can change people’s perceptions on how clothes shopping can be done. Imagine actually being able to see clothes on your body without having to try them on? No more of “well it looked good on the mannequin...” As someone who knows just how difficult it is to find things that fit right (soccer thighs are a blessing and a curse), having an application that can tell you exactly what size of a product to order, so you don’t have to feel the discouragement of taking a million things into the dressing room and have not one of them fit. The future is a beautiful place.

6/29

Posted on [June 29, 2016](#) by [bsobel3](#) June 29, 2016

This morning we learned about some of the higher-end 3D printers, as well as the important relationship of both machine and material. We may be able to start printing things this afternoon!

We are getting really close on finishing our methods for the cognitive assistant project. Stanley has started working with Flightgear and June has some ideas on how to make the assistant. I think the three of us together make a really good team.

On a completely unrelated note, I found out yesterday that the University System of Georgia just passed a new Sexual Misconduct Policy that is nothing short of horrifying. It gives a lot more power to the perpetrators while making it a lot harder for victims to find justice. It institutes a “less clear definition of consent” and makes victims jump through a lot more hoops in order to report and charge a crime. When I first saw this I thought it was a joke, like some satire to make fun of how bad current policies are today. But no, Georgia thought it would be a great idea to take a giant step backward and protect the guilty. Apparently this happened in the aftermath of several students who had been expelled after assaulting other students, so I guess the Georgia state government cares more about entitled rapists than about the victims. It makes me feel less safe to go to a University in Georgia. I could rant about this topic for hours, but I’m going to stop before the NSA starts to think I’m a terrorist or something.

6/28

Posted on [June 28, 2016](#) by [bsobel3](#) June 28, 2016

Yesterday afternoon we learned about the hardware of a 3D printer, plus saw some possibilities for our projects that we can do. I’m excited to get started on a practical aspect of 3D printing, but also a little nervous because it does seem so complex.

This morning I did a pilot test for Guliz, which was fruitful since it is very similar to our experiment. Also, one of the scenarios she did had the simulator fly over Atlanta, so it was fun to see a little of home, even if it was computer generated!

We had our Luncheon lecture with Dr. Sherry Berghefer, a professor in the College of Journalism. She talked to us about the difference between a real image, a digitally altered image, and a digitally created image. She also showed her research that it is extremely difficult for people to recognize when an image is real. It’s a little unnerving that it is so easy to make fake images and have people believe them. We talked a while ago about the dangers of virtual reality and how if VR becomes too good, it will be hard for people to know what is reality and what is virtual. I never stopped to think that this could have happened already...

6/27

Posted on [June 27, 2016](#) by [bsobel3](#) June 27, 2016

This morning we had another session in 3D printing. A lot of the deeper engineering concepts are going over my head, but I'm following along well enough. We did an activity using online Legos which helped to conceptually explain layers. It also made me miss all those days playing Legos when I was younger. Ah, the good ole' days!

June, Stanley, and I got to see the Flight Simulator in Guliz's lab that we'll be using for our experiment. We had another meeting today to go over everything we need to have done before our group meeting with Dr. Dorneich tomorrow.

Saturday we went to the Des Moines arts festival. We visited Karen at her booth and it was fun to see her in her natural element. She told us that she sold her most expensive piece that she's been working on for 10 years which is really impressive!

6/24

Posted on [June 24, 2016](#) by [bsobel3](#) June 24, 2016

This morning we started our "deeper dive" topics, a specific section of technology that we get to work in depth with. I'm in the 3D printing group. It seems like it'll be a fun group of people, but the course is going to be a little trying. We spent two hours this morning talking about the history of 3D printing and the definitions of additive manufacturing and rapid prototyping. But no matter what, I know that I will learn a lot from this course.

Journal club went pretty well, with the first team to do their article discussion. While the article on wireless EEG was long and not fun to read, the discussions were actually pretty good. Sam, Zoe, and Steven seem to work really well together!

6/23

Posted on [June 23, 2016](#) by [bsobel3](#) June 23, 2016

This morning we had another meeting with Guliz. We went through the IRB form, and have it pretty much finished which is a plus. However, we found out yesterday that apparently our project is not actually funded...I'm sure we'll figure that out at some point. We're working on our methods and are probably going to start the intro soon.

Today, our luncheon lecture was with Dr. Adarsh Krishnamurthy, an associate professor in mechanical engineering here at ISU. It is safe to say that his entire presentation went straight over my head. It was interesting though, I realized the importance of semantics and meaning of words when it comes to understanding language. I knew every word on the screen, I was even able to understand the sentence once the words were put together in familiar grammatical and syntactical ways. But I don't think I understood a single one of the concepts. How can you know exactly what you're reading but still be unable to understand a bit of it? It didn't really worry me, because I knew that I would probably never actually need to know this information at any point in my life. In the end though, I can appreciate mathematicians and how much they do behind the scenes in the world of technology.

6/22

Posted on [June 22, 2016](#) by [bsobel3](#) June 22, 2016

This morning we had another course in Unity. You really can do some cool stuff with it! Karen also showed us Adobe Fuse, a way to make your own animated version of yourself. I really want to look into that, because who doesn't want to be a video game hero? Today we learn about the Deeper Dive topics, and I honestly don't know which one I would want to do...

We had another meeting with Guliz, slowly but surely getting closer to figuring out that method. Also, I did one of the studies going on in the lab that was with a Head Mounted Display showing an ISU football game. It got me excited

for GT football in the fall! Plus it was a great way to make \$20 while doing my part to contribute to research.

6/21

Posted on [June 21, 2016](#) by [bsobel3](#) June 21, 2016

This morning while I was on the bus, I look out the window to see a rabbit fighting a squirrel. At first I was confused as to why these two gentle creatures would fight each other, but then I remembered what it usually meant when two animals were 'fighting'. So I thought about what would happen if a rabbit mated with a squirrel. I wondered what it would be called. The word "Squabbit" came to mind, which forced me to hold back a burst of uncontrollable laughter in the midst of a quiet, public space.

Yesterday we had our second course in Unity, where we learned to script things using C#. So far, I'm able to keep up reasonably well which is a good sign. Unity seems really cool, like I could actually design something useful using it.

We've been doing a lot of work on our Cognitive Assistant project. We met with Guliz for an hour yesterday to talk about how to make methods. We met again that night for over an hour to brainstorm possible tasks and variables and procedures. We met with Dr. Dorneich this morning with our ideas and were basically told "good try, but no. Try again" (in the nicest way possible, because Dr. Dorneich is a great adviser and always gives really good input). So yeah, it's a work in progress.

Today we had a Luncheon Lecture with Dr. Jon Kelly. He talked a lot about distance perception in HMD devices. It was an interesting topic, but seemed a little drawn out. You can only talk about perceived distances for so long before it becomes a little repetitive.

6/20

Posted on [June 20, 2016](#) by [bsobel3](#) June 20, 2016

Today we started our foray into Unity. It looks like a really cool application to use, and maybe even a little easier than Maya or Solidworks (or maybe that's because we did those first). I feel like I'm getting a new appreciation for animators and video game creators.

This weekend, we went to a ropes course for some 'team bonding'. It was kind of funny though because the instructors had icebreakers of learning names and we all were like, "yeah we've spent every day together for about 3 weeks, we know each other pretty well". But the course was fun. We all worked really well together and they high-ropes stuff was great. The Giant Swing and the Tower were both very challenging, but doing them made me feel extremely accomplished. But my arms still hurt...

We are slowly making way on our Methods section for our project. It's a process, but it's getting there...

6/17

Posted on [June 17, 2016](#) by [bsobel3](#) June 17, 2016

This morning, we had another session in Solidworks. We're learning to do a lot of cool things, and I do feel like I'm slowly getting the hang of the basics. A lot of the people here aren't a big fan, preferring the more fluid and free-form aspects of Maya. I personally like the structure and specificity. It might take more time, but overall I find it easier to use.

After that, we had Journal Club. I enjoyed the article, because it was about judging distance in virtual reality based on the location of the user's avatar. We got some good discussion in, which is always a good thing. One of the

things we talked about are the potential threats of virtual reality, as in it might become so immersive that people would choose to live in a virtual world instead of the real one. Other people mentioned how that was like Tron, but for me it reminded me much more of Lifelight from the Pendragon series. That's exactly what happened in the book, where everyone chose to live in their virtual worlds and the real world deteriorated around them. It's something to keep in mind going forward in virtual reality.

If anyone is in need of a great book series, 10/10 would recommend the Pendragon series. It's one of my favorites.

6/16

Posted on [June 16, 2016](#) by [bsobel3](#) June 16, 2016

Yesterday we started Solidworks. It's pretty different from Maya in that it's so much more mathematically specific. It's governed by more constraints and it seems a lot more precise. It's a bit more complicated to use, but I kind of like the structure of it. Once again, lots of buttons and functions to get used to!

This morning we had a brainstorming meeting with our team. It was a good way for all of us to get our ideas down, and I think it's helping us get closer to designing a method. This was the first meeting where Stanley, June and I were really able to speak up and talk about our ideas. It was a great experience, especially because of the respect and advice we got from both Guliz and Dr. Dorneich. It's kind of fun to start something from scratch, because you get to watch the process of creation of your ideas.

Today our luncheon lecture was with Dr. Veronica Dark, a Psychology professor here at IState. When I heard it was a psych professor, I got really excited to finally talk to a fellow psychologist. She talked about basic Sensation and Perception principles, which was fun since I had just taken the class last semester. She then went on to talk about Attention. While I was of course interested in her presentation, I did feel like it was a little long and dry. It's the part of psychology I'm not a huge fan of, the small and complex studies that form the theories. The big thing I got out of it was the importance of Top-Down vs Bottom-Up processing when it comes to HCI. The engineer/programmer provides the bottom-up aspect, using their knowledge of how technology works to create something that can function properly. However, they need the psychologist to provide the top-down aspects so that the product can be used by real people and be much more far-reaching. It's the beauty of the interdisciplinary relationship of HCI.

6/15

Posted on [June 15, 2016](#) by [bsobel3](#) June 15, 2016

This morning we had our last session of Maya. It was fun going into the detail of the scene I made, but I came to see how complex the software actually is. There are just so many buttons and words that I am extremely glad that I'm not a design major. It was a little much for me to handle. I like how these sessions are structured though, just to give you an introduction to these applications. That way, if I ever need to use one in the future, I'll at least have a basic understanding. Plus, I know just enough to make people think that I actually know what I'm doing, which is pretty much my philosophy for life.

Yesterday evening we did light painting, or using colored phone screens and a long-exposure camera shot. Most of the pictures turned out really well. I of course had to unleash my inner srat star and got one for AGD. But you know what? I feel no shame, it turned out awesome.

Up next is Solidworks. Get pumped.

6/14

Posted on [June 14, 2016](#) by [bsobel3](#) June 14, 2016

Yesterday our second Maya session went as well as the first. The only problem I had was that I got caught up in how fun it was that I would forget to listen when they were teaching us how to do something new. I'm slowly getting the hang of visualizing something in 3D space. You never really take into consideration how hard that is until you actually have to do it. And also, even though we are modelling in 3D, it is presented in 2D space (a computer screen). It makes me excited to use those virtual reality glasses again!

We are meeting with our group today to finalize our problem area paragraph. As our first milestone, it will be nice to finally have something done. I'll be happy when we get it done.

Today we had a Luncheon Lecture with Dr. Ming-Chen Hsu, a mechanical engineering associate professor. I was worried I was going to be overwhelmed and bored by the topic, but I actually found it pretty interesting. Dr. Hsu also was a very good presenter in that he made everything easy to understand, even to a lowly psych major like myself. I feel like if I were an engineer, I would be a mechanical engineer. I would love to be able to fix real-world problems and create these amazing new technologies. In reality, it is way too much math and physics for me (I prefer my equations to have numbers in them). The concept I love the most is "energy can't be created or destroyed, only transformed". It's amazing to think that all of the energy we need in the universe is already out there, we just need to figure out how to use it. Everything has been provided to us, it's up to us to learn to understand it.

He talked to us a little about Graduate School, but in a very different way than the other speakers. He talked about how hard it is, that the amount of work is enough to break even the best of researchers. On the one hand, I don't know what he was thinking bringing in that giant mood killer. On the other hand, it is something we have to keep in mind as we make our decisions. You just have to remind yourself:

"Whenever you feel like you want to quit, remind yourself why you started"

6/13

Posted on [June 13, 2016](#) by [bsobel3](#) June 13, 2016

Today we had our first experience with Maya, a 3D modelling software. The basics of it are pretty easy, but I have a feeling that when they start to get into the more complex aspects, it's going to be a little much to handle. But just like with the C++ course, the instructor Maggie is a good teacher who makes sure to explain everything slowly so that everyone can stay kept up.

We met with Guliz, and we are finally almost done with our problem paragraph. Once that's done, we'll get started on the lit review and then onto actually formulating a method. It's nice that we have finally the intense quagmire of papers to give us a specific direction. It's like this twisting tunnel finally has a light at the end of it!

Saturday we went to the Ames Farmer's Market. As with any 'event' in Ames, it has to be taken into consideration the city that they are happening in. It was basically just a street with some tents selling pies and butters. It was still fun, and a group of us just spent a while sitting on the grass in a little pocket park which was good bonding time!

Last night, I watched the Tony Awards for the first time and it was glorious. Well, Hamilton just won everything, but it's still fun to get that annual update of Broadway shows. Hamilton's performance literally gave me chills, and I am not exaggerating when I say that I would sell my left arm to get tickets to see that show (ok, maybe a slight exaggeration...). After that was Game of Thrones, needless to say I'm super pumped for the season finale next week.

As an aside, I would like to point out that Google Chrome considers the word 'Ames' to be a typo. Just think on that for a bit.

6/10

Posted on [June 10, 2016](#) by [bsobel3](#) June 10, 2016

And now we are officially done with Week 2. Time sure does fly when you're having fun! And I can honestly say that this work is fun. I'm one of those weird people that gets enjoyment out of doing intellectual activities. What can I say, I like it when I feel smart. Today's C++ session went well, and I'm still understanding it all. It's helpful that it's similar to Java in that they are both object-oriented programming languages.

Yesterday we had Craft of Research and this morning we had Journal Club. I like having these classes, they are teaching me the skills of critical reading in academia that I probably would not have learning in any other class. It's the little things like this that will help put me ahead when it comes to the next few years of school plus the eventual grad school.

Yesterday we went rock climbing at the gym. Honestly, I was better at it than I anticipated. My forearms are only a little sore and I don't have any intense blisters so I consider that a win!

It is extremely hot here, but at least it's not humid like it is in Georgia. I haven't spent summer in Georgia for two years now and honestly, I'm not too sad about that!

6/9

Posted on [June 9, 2016](#) by [bsobel3](#) June 9, 2016

Today we had our Luncheon Lecture with Dr. Jim Oliver, the head of VRAC. He just talked to us about "things you don't know about grad school" which was extremely valuable. It made me realize how little I know about the process and how I was going into it pretty blind. No one in my family has ever gone to grad school, so it's not like I have a lot to work off of. However, he was just like Dr. Winer in the way that he really sounded like he enjoyed what he was doing. I think the most important thing people don't understand about scientists is that they are proof of people who chose to do what they love instead of selling out to industry. They know that they could have taken their knowledge to a corporation and be making 3x their current salary, but they know that they would not be anywhere near as happy as they are now. This is important for me to hear, that being a researcher is far more rewarding than a corporate stooge. It gives me new motivation for the future, and I can honestly say that it is an exciting place 😊

6/8

Posted on [June 8, 2016](#) by [bsobel3](#) June 8, 2016

Today we had our third section of C++. It's still going pretty well. I had a little difficulty with figuring out how to calculate the Fibonacci numbers, but I'm proud of myself because I sat down and figured it out myself. I'm also trying to find a nice way to explain to people that if I want help I will ask for it. If I'm having difficulty, I want to make sure that I have no idea how on earth to move forward before I go and have someone do it for me. I also get really self-conscious when people look over my shoulder during my problem-solving process, because they're looking at something that's wrong and they're like "Um, you realize you didn't do that right?" and I just want to respond "I realize it's not right which is why I'm still working on it." I think that the instructors all do a good job to make sure that we don't get stressed and overwhelmed by the information, but it's a personal trait of mine to like being left alone until I seek out assistance.

Veering off that topic, we had a great meeting yesterday with Guliz and Dr. Dorneich. They are both extremely helpful and interested in what we have to say. I appreciate how respectful they are of our (the interns) thoughts and opinions. They actually listen to us and make us feel valued. We are all still a little overwhelmed by the fact that the project is in such preliminary stages. June, Stanley and I are getting on the same page and I feel like we are really starting to move forward.

Last night, we all sat down to design the program T-Shirt. In my extremely biased opinion, my design is by far the best. However, I was talking with someone and they mentioned how it is extremely sratty. I just have so many sorority tshirts, I know how to design one properly. The ones from last year were funny but so unbelievably nerdy. I mean there is a fine line between classy geek shirts (aka Sam's wardrobe) and face-palm worthy nerdy. But in the end, I respect the views of the rest of the group and will hold no animosity if they choose another design.

On an unrelated note, my desk is perfect for eavesdropping on the teacher interns. Fun fact: Justin is a volunteer firefighter and used to be an MMA fighter #casual.

6/7

Posted on [June 7, 2016](#) by [bsobel3](#) June 7, 2016

This morning was our first experience with independent work time. We had about 2 hours to ourselves to figure out what needs to be done and to work on it. I like the unstructured time, and since I am the one deciding what to do, it makes me feel much more productive and accomplished than if it was just a regular course. I just spent the time going over the articles I found for the project, but I enjoyed it because they were all interesting. They were about Human-Automation Interaction, and I think they provided some great tips and starting points for our eventual prototype. Today we have our meeting with Dr. Dorneich, so it'll be nice to see how we can move forward with the project.

Yesterday we had our second section of our C++ course and I was still able to keep up with everything. Someone told me that I was picking it up pretty quickly which is a huge deal for me, someone who is not a programmer. My last CS class had about 200 people in it, so it was hard to tell where I was skill-wise in relation to others in the class. It's nice to receive the affirmation that I might not be a complete failure of a computer programmer, and I might be able to be successful in my minor and future potential programming challenges.

Today, we had our first Luncheon Lecture with the speaker being Dr. Eliot Winer. While I personally think he's a little long-winded, he provided some amazing insight into our potential futures. He's one of those people who has done so much in their lives, that when they list their accomplishments they seem almost super-human. But the biggest thing for me is that when he talks about his research, he is still excited by it. He gets enjoyment out of creating new apps and finding new ways to help people. Another huge thing is the amount of doubt he admitted to having. He mentioned how a hospital informed him that they use his 3D imaging application in all of their procedures, and he responded with "Wait, seriously?" I wanted to tell him 'why are you surprised at your success? you're brilliant!' and it made me think about when I am going to be able to think that about myself.

6/6

Posted on [June 6, 2016](#) by [bsobel3](#) June 6, 2016

Today marks the beginning of our first real week of study. We spent the morning getting an intro to C++ programming, and so far I am keeping up which is a good sign. However, we pretty much just learned how to launch Visual Studio, compile, and run. I have a feeling it's going to go 0-100 real quick. Luckily, our instructor Stacey is a very good teacher. I can always appreciate a good teacher, especially when they're doing something like CS. I'm happy to be learning C++ in an environment like this, where there are no grades and minimal stress, so I can just focus on learning as much as I can. That way, when I take the actual class later, I can have some experience going in.

We also finally had our first face-to-face meeting with the grad student leading our project, Guliz. What's cool is that she actually went to Georgia Tech for her Masters, and she knew Dr. Frank Durso who I have been working under a lot for the past year. On that note, one of the papers I found as background for our project was actually written by Dr. Durso. It lets me know that I am definitely on the right track with my research!

This weekend was relaxing which was nice. We went to something called Summerfest in Ames on Saturday, but to call it a 'festival' is a bit of a stretch. I forgot that this is Ames, Iowa so 'big festivals' are more like 'food trucks and face painting in a parking lot with some farm animals to pet'. There were also a lot of little kids running around, which ok for the most part. On Sunday we had an REU welcome picnic in a nearby park, which was a fun way to get to meet all the other summer interns at Iowa State. Someone brought a tug-of-war rope so I was trying to teach people how to properly tug (thanks Greek Week!), but that didn't really work out.

Overall, I am excited to learn more C++ and get a real start to the Cognitive Assistant project.

6/3 Blog Post

Posted on [June 3, 2016](#) by [bsobel3](#) June 3, 2016

So this first post comes about as the first week here comes to a close. We have only been here for three days but it seems so much longer than that, probably because we have had so much going on. The way I have been describing this experience so far is "extremely overwhelming but incredibly excited". The people and topics here are exactly what I have become interested in my past few years in college and what I hope to pursue as a career. It's amazing to see what my future could hold.

Today we took a tour of the technology in the lab and I felt like a kid in a candy shop. It was a reminder that being a nerd is cool and so much more fun. I finally got to see a 3D printer, and I am really excited to learn how to use one. The C6 was mind-blowing, based on its scale and complexity. As they were explaining the amount of computing power and funds it takes to power this machine, my mind just went numb thinking about it. They told us it takes about \$750/hour to run, which made me want to tell them to turn it off, we weren't *that* special. But my favorite was the virtual reality headsets. It was just a whole new way of looking at the world, and I never wanted to leave it (which is actually a frightening concept). Painting in 3D sounds so simple, but it was one of the coolest experiences of my life. I hope I get the chance to use it more in the future!

We also had our first research team meeting, and our project sounds amazing. I feel so fortunate to be have the opportunity to work on real-life applications of HCI. It's a little stressful that the professors and grad students are relying on us to actually help create this NASA prototype. I still feel so young and inexperienced, but I'm hoping that won't be the case a couple weeks from now.

Next week is when the real fun begins, and I feel both excited and nervous as to where the courses and research take me.

p.s. may or may not be drinking too much coffee.