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Mary Truong



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August 3rd (Fin)

August 3, 2018 [mtruong](#)

Today is the last day.

Topic I'm currently thinking about: connection, growth, disconnection.

It's likely that I will never see some of these interns again, but I'm touched by the accumulated gestures of open kindness that they've offered. I'm glad that we've become friends. I'm appreciative of the intelligence and dedication they've put behind their work; it has pushed me to want to be a better version of myself. If we do meet again in the future, I hope that we feel like strangers in the best possible sense- that we have grown to be more than our selves now (everyone in this program seems to show that great potential). Stephen recently returned the letters that we wrote at the beginning of the program about what we value- maybe as a touchstone to give us grounding after 10 weeks of growing.

I still don't know where I'm going, but seeing as my past self made the wonderful decision to attend SPIRE, I think I'll be able to trust my future self as well. I imagine that the projects and places we occupy in a few years will be astonishing in breadth and depth. I hope we accomplish some cool things.

Iowa has given me a few warm memories. I'm glad to have met all of you. (And if you end up in the Chicago area, let me know- I'll let you crash at my place).



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REUI2018 [Leave a reply](#)

August 2nd (Penultimate)

August 2, 2018 [mtruong](#)

Some things that I've learned (or relearned) this summer:

A positive workplace environment can dramatically improve how much you like your work. Furthermore, good team rapport keeps communication easy (meandering conversations and action plans both have their place). At the end of meetings that involve tangents about Sharknado, ghosts, home renovations, or whatever else your faculty mentor might include, it's helpful to summarize the work-related content.

Failure is easy. You can try hard and have nothing pan out. Have a back-up plan.

Things will break (some things a bit more expensive than others). Make sure to take responsibility for your failures. Additionally, be sincere about your apologies.

In research, everything is a team effort. That being said, give people their due (and make sure to take the lead if you can competently do so).

Networking is just something you have to get used to. Make sure to talk to people, especially if you like the work that they do (sometimes, even if you dislike their work). Today is the day I look connect to everyone on LinkedIn. Furthermore, networking is important in swarm activity.

We had the symposium today; it went along very swimmingly. Tom told me that I should do what makes me happy (he also told me that you can make money doing anything. I'm a bit skeptical, but he has been a trustworthy person so far). Afterwards, Stephen and I had a short meeting. It's been another summer, and I still don't know which direction to face my life towards (Although it's a bit incorrect to say I have to face my life only towards CS or art- they're not mutually exclusive). This has been a good summer, and I have a feeling that next summer will be pleasant as well. I'm looking forward to the projects that future me has in store for me.

Tomorrow is the last day. I'm looking forward to it.

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July 27th – 30th (Praxis)

July 31, 2018 [mtruong](#)

July 27th: Can't remember. We did work of some sort, but I think it was a relatively slow day.

July 28th: I went to Val's for the last time to return my bike and to volunteer a bit. Learning from her has been such a pleasant experience; during this last visit, I learned to change a bike tire. I'm considering getting a bike on campus (especially now since there's a new bike lane. Riding a bike in the winter is a frigid experience, though). Aidan helped me get a couple of cool pictures from the back of the warehouse.

July 29th: Stephan, Teandre, Aidan, Victoria, Kira, and I went to Adventureland. The buildings along the street were adorable. I expected to return by 6:00, but we were there 'till the last minute. It was wonderful- the closing hour was by far, the most entertaining. We were able to ride a roller-coaster repeatedly (the rickety wooden one that wobbled a bit). I also witnessed Stephan freak out from a

tiny spray of water on an underground ride. I had a bit of motion-sickness and a headache at the end of the day, but a good kind. Although Adventureland wasn't a great amusement park, I thoroughly enjoyed my day. I would also like to thank Angelica for her patience in transporting us and waiting for several of the interns (including me) to get our junk food fix at the end of the day.

July 30th: We worked on the paper and spent two hours practicing our pitch for the symposium. There's so little left to do. The summer is wrapping up, and I need to pack. At this point, I have a certain fondness for Ames (mostly because the weather isn't so humid). One of my favorite sounds of the summer is hearing a random neigh from the horse barn at night. I do enjoy the mulberry trees around here, too.

It's almost time to write a post summarizing my experience (things I learned, etc).

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July 25th – 26th (Frieze)

 [July 27, 2018](#)  [mtruong](#)

July 25th: I can't remember what I did this day. Probably worked on the poster and paper.

July 26th: Tom accepted our poster, which is a relief since it's been a somewhat horrible task to complete. That only leaves getting the research paper written, and then the Drone group will be finished with this project. I'm simultaneously pleased and disappointed when I think of what we've managed to get done this summer: I burned so much time trying to crack the drones, and I barely made progress on that front. That being said, the last couple of weeks have been concentrated with actual work (The late night at the sheriff's will be one of my fondest memories for this summer). I do think I have a better grasp of the research process, and I could see myself working in academia (although my future continues to be up in the air). I'm sure I've learned skills for collaboration and the benefits of relying on my fellow teammates.

Outside of research, yesterday, Stephan, Inshira and I played badminton (yet again) and basketball. It was a rough time, but I did throw a 3-pointer- a small kind of an accomplishment.

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July 23rd – 24th (Sepulchral)

 [July 25, 2018](#)  [mtruong](#)

It's getting harder to write these posts.

July 23rd- Spent a bit of the day realizing that some of the data results didn't make much sense; then spent some time trying to learn how to do ANOVA using R. It turned out badly (although I'm not sure why). After that, continued working on the poster and wrote the results of the informal interviews out in our draft of the paper. After a day of work, had a 40 minute meeting with Tom discussing the data a bit more and critiquing the poster. Officially turned 20.

July 24th- The poster has become the bane of my existence; I should have used InDesign for it— formatting text in Photoshop is an agonizingly slow process. I'm a bit surprised when I realize how much time was sunk into this (and how mediocre it looks despite all the time lost). Spent a lot of time working on it, condensing the information more. Someone told us the wrong dimensions, so had to alter the poster more (space is at a premium on these things, and we lost so much of it). I'm sure we worked on something else. I forgot what about.

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July 20th – 22nd (Iterate)

 [July 23, 2018](#)  [mtruong](#)

20th: Spent a lot of time working on the poster. Still have to do the results and conclusion part (I'm not satisfied with the methods part, either, so I might change it). Looked thoroughly at the informal interviews. Watched tv with some interns. Watched Queer Eye: a wholesome show, and I liked seeing Atlanta in the show. Also watched American Horror Story: less wholesome, kind of interesting, but at this point, I had watched enough television that it had become a drag.

21st: Went to a mall in Des Moines- was disappointed by the interchangeable nature of this mall when compared to every other suburban mall I've ever been to. I impulsively bought candy. Finished watching Madoka Magica with a friend. Spent a little bit of time thinking of the kindness of teenage girls, purity of intention, and curses.

22nd: Spent much longer working with Val than I anticipated. I left before we completely finished a bike (she got stuck on the shifters). Next week will be the last time I'll be at her place- I'll be returning the bike I borrowed for the summer. Learning from her has been one of the most valuable parts of my summer, and so I took a few pictures of the cool things in the back. After leavin Val's, I caught the tail end of the hackathon- saw Gabriel's drawing program powered by the Raspberry Pi. Later, wasted an hour and half of my life by watching Sharknado. Also watched It Follows with a couple other interns.

Chance came out with a few new singles last week: 65th and Ingleside is good. Stephan is pretty much done with looking through the data. I pretty much finished looking at the informal interviews and noted the most common points in the interviews. That means we can write the results and conclusion, and hopefully, the paper in a well-drafted form will be done mid-week (same for the poster). We have one full work week left- leaves a bittersweet taste.







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July 18th – 19th (Amanuensis)

 [July 20, 2018](#)  [mtruong](#)

I didn't post yesterday despite my best intentions to do so. This will probably just be a long ramble about the meeting I had with Alex Braidwood. (Tom, if you're reading this, just skip to the last section).

July 18th: I got coffee even though I don't like coffee — maybe next time I have a coffee meeting, I'll get hot chocolate instead. Alex told me that getting an MFA was valuable (Probably b/c he's the assistant dean to a art + design college... he also threw out the phrase "the MFA is the new MBA," something that my art teacher has also said. Unsurprisingly, I am even more reluctant to pursue an MFA; I'm not very interested in being a lucrative worker for the corporate world) because you develop your practice. In doing so, you also learn techniques to best communicate your work. He noted that the MFA was also important to gain connections in the art world, but that was of less importance than building a practice.

I primarily was interested in getting an MFA to network in the art world; to me, it seems that you can develop a practice entirely outside the university institution (I can't deny that the university is a valuable resource- having access to a printing press and CNC machine among other things is very convenient for artistic experimentation). I was also just curious to know what going to an art school would be like (Not that I'm dissatisfied with Northwestern- if I had gone to art school for undergrad, I think I would be frustrated by how limited my classes were). I want to know what it's like to be completely immersed in art ideas and people, and getting an MFA seems like a good way to learn about this type of environment. But if an MFA is best for developing a practice, something that I'm already doing, then financially, it seems like a terrible choice.

I was alarmed by how casually Alex talked about money. He said something among the lines of, "money is everywhere- you'll be able to make a living easily." My family's low-income, and I've never had the experience of money being everywhere. Even if I get a teaching assistantship, getting an MFA is almost guaranteed debt. I'm not good enough at programming (yet) to take on freelance jobs that could hypothetically sustain income for an art studio or supplies. I don't know what to say other than it seems privileged to be able to brush off the expense of an MFA so easily.

We also talked a bit about art- especially using technology in art. He said that he used computers in art because it was relevant to the times (contemporary art in a nutshell). When I use code in my art, I keep thinking about its implications. So much of art is about deliberation and being able to justify why you make the choices you make, and from there, seeing if it communicates what you intend. Often, using code in art feels gimmicky, like I'm feinting at being a person at the avant-garde. I don't know if I'm using technology in art just as a convenient way to differentiate myself from other artists, or if I'm genuinely interested in communicating my thoughts about technology through my art.

We talked about more, but this post is getting incredibly long. Maybe I'll continue these artistic considerations later.

July 19th: Spent some time transcribing the informal interviews. Had a semi-serious discussion with my drone teammates over the importance of keeping experimental information confidential. Fixed up the posters and received feedback from Tom (need to fix it up again today). Spent a bit of time writing the methodology section of the paper and drafting out the results.

On the agenda today: Poster work pt 2, going over the informal interview to gather common points between the 10 participants, understanding the data (errors, p-values etc), and using this understanding to write the results.

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July 17th (Demotic)

 [July 18, 2018](#)  [mtruong](#)

Yesterday, we went back to the sheriff's office to get the other half of our participants. Another full day of work (not as late as Monday), but I don't mind it so much. By the end of the day, I was flagging, though- the last two interviews were a struggle. For our trouble, we got a Happy Meal (TM), and I took an Edna Mode figurine for my room. Conducting our experiments meant that we didn't get to participate in the light painting, but that's alright. The guest for our luncheon lecture was interesting. Two separate people this summer have told me to check out his work before our lecture, but I never did. I actually got coffee with him today and he gave me some advice on being an artist and developing a practice. He told me that I should apply to ISU for grad school, but I don't know if I'd be satisfied with Ames for two full years.

Today, I really should have the poster done. My fellow teammates are logging in the data from our experiment and hopefully analyzing it by the end of tomorrow. The poster is definitely looking better than it did yesterday, but it needs a lot of work. I'm hoping that I can write/edit the methodology part of the paper, and if the data is analyzed, then start drafting the results/conclusion.

I'm ready to get a good amount of sleep tonight.

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July 16th (Somnolence)

 [July 17, 2018](#)  [mtruong](#)

A short post today: Yesterday was a full day. Finalized the experimental material after running a couple of our peers through it. Tried to get a good feel for actually running the experiment. We went to the justice center afterwards; unsurprisingly, a lot of our time was filled with dead time. We ran less people than I would have liked, but deputies are busy people. I think we'll get a bit more tonight. We arrived back to the apartment at 4 AM. I'm a bit drowsy today, but nothing I haven't handled before.

On today's agenda- doing the things we didn't do yesterday. Writing the methodology (and re-editing the intro), and hopefully making

the poster design better. I'm a bit dissatisfied with my graphic design skills, but with a bit more practice, I think that things will get better.

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June 12th – 15th (Eigenspace)

 [July 16, 2018](#)  [mtruong](#)

12th: A fairly long work day- we mainly worked on the writing the introduction to the paper, worked a bit on a draft of the poster, and I attempted to gain flying skills with the drone (a somewhat difficult task). Somehow, that took a full day. Afterwards, we went to the justice center again to grab video footage for the experiment. It took 3.5 hours- we arrived back to our apartment at 10. I feel like most of the confusion we had about the experimental procedure cleared up yesterday, and I'm feeling relatively good about the experiment.

13th: Stephan stitched up the videos; I worked on the poster draft. We finalized our experimental material. It was a lazy, but good day.

14th: Did yoga at Bandshell Park. It drizzled a bit during the first half, but that was somewhat pleasant. I missed the bus afterwards, so I walked back to campus. It was an okay walk. I went to work for a little bit, but didn't accomplish anything really important. Then, I watched a fairly terrible show for an extended period of time. It was exhausting.

15th: Went to Val's to learn a bit more about bikes; I want to go one more time before the summer ends. A pleasant day. I continue to love mangoes.

The t-shirt design is finalized; here's to hoping that it prints well (although I wouldn't be surprised if it didn't). Tom says that we have 14 people available to do our study (a surprising amount! Better than I expected). Tom estimates that we'll be running experiments until 3:00 AM today (which I'm excited for, but I need to get some caffeine and snacks). Tomorrow will be a bit better (the day ending at 10 PM). Today, I think we'll work on the research poster content, doing a thorough practice run of the experiment, write the methods part of our research paper, and just get mentally prepared to do this thing.

When we drive through Nevada, Iowa, we can see the corn and bean fields; they've grown tall enough to fulfill my expectation of what I thought Iowa would look like. The humidity has decreased a lot, too. If the weather in June were like the weather now, I think I would have had a much better first impression of Iowa. Topic I'm currently thinking about: the insularity of the art world. Maybe I'll expound on this topic in a later post.

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June 11th (Revanchism)

 [July 12, 2018](#)  [mtruong](#)

Things that got done yesterday concerning drone stuff: altered the questionnaire, started paper draft, started on the poster draft. Looking at the drone code is unnecessary at this point, and somehow, that makes looking at code about 10x more pleasant than a few weeks ago. Today, I'll have to dedicate a good chunk of time to accurately piloting these machines since we'll be going to the justice center tonight (around 5:30- not as late as I wanted, but hopefully, in the future we'll get to do midnight tests).

I slept for 11 hours yesterday. I guess I feel well rested, but I'm a bit saddened to think of all the time I lost. I wanted to start reading *Cloud Atlas*, but that'll be something to do this weekend.

Topic I'm currently thinking about: Personal "brands," especially among artists. One of my art teachers has an excessive amount of patterned converse that she wears as a way to be recognizable to curators and other people in the art world. She told me that she wore them 1) as a way to inspire confidence in herself when interacting with the uber-elite art world and 2) to distinguish herself from other artists so that the elite art world will promote her work over others.

I understand that it's necessary to differentiate myself from other artists (it's just the nature of Western artistic practice- contemporary art is valued through the lens of individuality and through that, freedom. I blame the Impressionists), but the concept of branding feels harmful. I think that this branding creates an exaggerated, caricature-ized image of yourself that you then have to mold yourself into, and fulfilling your branded expectation limits the ways you can grow. Artists do that a lot, though; once they find a niche, they often defined by it (think of Judd and boxes, Flavin and lights, Rothko and color-fields). I'm a bit worried that I've already created a sort of brand for myself through the way I present myself, especially through the way I dress. I'm also worried that any eccentricities in how I dress has become a substitute for actual personality. I don't really know how to define myself as an artist, or if I even should.

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June 10th (Abstemious)

 [July 11, 2018](#)  [mtruong](#)

Yesterday consisted of clarifying and condensing our experiment as we get ready for it in practice. I'm worried now that we've gone too bare-bones with these new changes and that our research paper will be incredibly sparse. I'm also worried that these changes will reduce the novelty of our experiment- I don't expect this study to add significant information to the field, but it should contribute something. That being said, I do feel like the Drones team has been collaborating well, considering how we worked at the beginning of the summer. Supposedly today or tomorrow, we will be returning to the justice center to create experimental materials. Hopefully, that's the case. I don't want to be involved in more time crunches than I already am.

There are a couple of things to alter with the pre and post-study questionnaire. We have to create a map of the clearing area and append it to our questionnaires (easy tasks to be done today). We also need to get our research paper and poster drafted.

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June 9th (Toponomy)

 [July 10, 2018](#)  [mtruong](#)

Yesterday, I continued my stream of unproductivity. Good news: I was able to get bytes of data sent from the drones to be written to a video file (instead of being streamed). This knowledge would have been most helpful a full two weeks ago. Capturing keyboard inputs continues to be difficult (maybe that's a good thing, though; if keyloggers were easy to make, then I'm sure we'd all be screwed in this digital age). Bad news: we continue to have a lot of work to do, mostly concerning planning/prepping for the actual experiment.

Throughout this summer, I have always been concerned with how much time we have, and I continue to do so. I think this next week might be a bit painful. Our next visit to the justice center has been pushed back to Wednesday or Thursday night, so we have a little bit of time.

Outside of research, I went grocery shopping yesterday, and I felt like I was in a stupor the whole time. I bought an eggplant, despite not knowing what I would actually do with one. At the very least, I have some food now. I made crepes(?) this morning, but they leave a lot to be desired. I wish I had more mangoes.

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June 7th – 8th (Alethic)

 [July 9, 2018](#)  [mtruong](#)

June 7th: The drone team went to Story County's Justice Center to figure out the dimensions of the floor for the experimental clearing op- turns out that we're going to have to rethink our experiment (I'm not at all surprised. So much of this summer has been constant failure- speaking of failures, we also broke a monitor. Fun). Dr. Stone said we would have to run the experiment sometime next week, probably around 11 PM. I'm looking forward to it; I like staying up late. Later this day, I finished *The Handmaid's Tale*. I'm kind of mulling over how terrible things are normalized, but I'm thinking more about Offred's privileges in a dystopic world, and why Atwood would choose to tell Offred's story. After I finished this book, when it was really late (or early?), I went outside to try and find the bike pump that Tom said was near Memorial Union so that I could fix a flat tire. I didn't find it. I thought that solitude and the coolness of

the night would be comfortable, but unsurprisingly, walking alone during the witching hour is fairly frightening.

June 8th: I walked to Val's to fix the flat tire- the hour long walk was fairly miserable, and I hope I didn't get a sunburn. Val is a very fun person, though, and she's worth the misery. I helped her for a few hours and learned some tidbits about bikes. It was a pleasant way to spend an afternoon, and I think I'll return next week. Afterwards, I talked to and played a game with my younger sister.

I felt somewhat productive this weekend. That being said, I think it's worrisome to know that so much of my self-worth depends on how productive I deem myself. I want to blame capitalism, but that's unfair- there are other factors to consider (furthermore, I'm materialistic... I'm looking forward to picking up my paycheck tomorrow). Finally, I'm almost out of food, which means I have to cook something- a chore that I kind of despise. There are so many steps in cooking: planning your meal, purchasing what you need at the store, prepping, cooking, and then cleaning. What's worse is that if you end up cooking something you dislike, you still have to eat it.

I really like the mundane nature of keeping these blogs. I wonder if future me will appreciate the banal things I do now.

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June 2nd – June 6th (Budgie)

 [July 6, 2018](#)  [mtruong](#)

There are a few days that I need to log in- let's see if I can remember what's been going on.

June 2nd: Got some threads to work with the drones in Python, but not in the way that they need to work. Still, it was nice to make incremental progress. We're not going to use Python, but I think that diving into poorly documented API's and attempting to read other people's code was very helpful. I don't know how much I've grown as a programmer, but I do think I learned to be a bit more gritty as a person.

June 3rd: Spent a lot of my day reading about shaders. Watermelons are so much heavier than I thought they would be. Saw some fireworks! Watched some terrible anime.

June 4th: Thought about the insignificant ways that I reinforce gender roles during our barbecue. I came pretty close to drowning. It was an unpleasant experience, but it's good for me to recognize my own mortality. I should probably sign up for swimming lessons next school year, but I'm kind of swamped with other extracurriculars. Had a game night, watched a horror movie. I want to watch more horror movies.

June 5th: Despite having the day off, went in for a half day of work. A lot of other interns did so as well (are we diligent students? Is it just that Iowa is so boring that work provides a meager form of entertainment?) Received an email saying this weekend, we'd perform the experiment, and I became a little bit horrified thinking about how much we still had to do. Stayed up very late to write up the forms that our participants would need tomorrow. Feeling the impact today.

June 6th: Legitimate progress made. Did a lot of writing/editing, watched Stephan figure out PBP displays. I'm feeling somewhat confident as we go into the experiment tomorrow, which is wildly better than the fear I felt at 3 AM last night. Things feel like they're working out.

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June 29th – July 1st (Occlusion)

 [July 2, 2018](#)  [mtruong](#)

Friday: Spent a lot of time in the C6, watched Paul/Glenn trying to fix some errors. Realized that I'm like a cat: climbing up things is relatively easy, but getting down inspires fear in me. It was interesting to see the mirrors/projectors used to project to the ceiling of the C6. Gabe showed his slightly modified plane game- it was pretty amazing in the C6, although the nodes didn't always sync up. Later, spent a long time doing "lateral thinking puzzles." Realized that I like to know the answers to things, but I don't like expending effort to do so. No progress made in the front of drone research. Finishing the literature review paragraph was difficult, and I want to ensure that our sources are cited correctly.

Saturday: Mostly uneventful: worked on the shirt design, meal prepped for the next week. I'm tired of making American food, so I guess that means I have to go to one of the two Asian stores in the area sometime soon. Read a tiny bit about shaders and continued looking at the drone libraries somewhat futilely. Contemplated the difference between yogurt covered pretzels and white chocolate covered pretzels.

Sunday: Even less productive than the day before. Spent more time thinking about threads/thinking about how little I know about threads and wondering how exactly packets of information are sent/captured by the drones. Realized that networking was important in this respect as well as in creating a swarm of drones. Cue disappointed attitude again. Ate dinner with other interns at a Vietnamese/Chinese place- wondering about its authenticity- and spent some time thinking about sibling-hood and what free will entails.

Ate a mango. More tangy than I would have normally liked, but was still satisfying. I said earlier that time was essentially the only tool my project group had in its disposal, and that time wouldn't be enough to fully realize the project. I think I was right. We're almost out of time, and I can't help but be disappointed in our lack of progress. I also don't think I learned time management skills.

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June 28th (Specular)

 [June 29, 2018](#)  [mtruong](#)

A short post: The previous day was spent looking at more python packages and revising the lit review. There is a lot of work left to be done, but somehow, I feel less stuck than I have in the past couple weeks. I think at the end of the weekend, I (might) have a script that can control the drones well. Incremental change is important to boost morale. (I doubt that we'll ever get an actual swarm going, though- networking is hard). It might be a bit too late. There's a lot to do this weekend (why is it that every weekend seems to be busy?). I'm feeling better about the drone project right now.

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June 27th (Ambient)

 [June 28, 2018](#)  [mtruong](#)

Yesterday, I spent significantly less time on working on the drones. Unsurprisingly, yesterday, I left work feeling much more spirited and pleasant than I usually do. When learning about shaders, I had to dredge up math that I haven't touched since high school, but I think I'm alright now. I'm not as enthused as I should be about making an app for the C6, but that's alright, too. I keep thinking about how little time there is left in the program and the likelihood of my project to fail.

Topic I'm thinking about today: queer game studies and horror games. I went to a PHD candidate's talk about queer games and space. She claimed that games are usually characterized by agency & player choice, and that queerness manifests in these games through restrictive mechanics. I think she also mentioned that queer games often include estrangement from the domestic/familiar spaces because of the exclusion of queer people from heteronormative societal standards. For example, *Gone Home* takes place in an isolated mansion with a kind of creepy atmosphere- despite being the controllable character's home, the domestic feels foreign and off-putting.

I'm also thinking about horror games taking place in domestic spaces; there was one where a portal in your bathroom transported you to some terrible place. I think there was another idea of a hallway in a house becoming progressively more terrifying as a the player passed through it. Horror games also make use of restricted player mechanics, like in *Amnesia*- I'm pretty sure that you can't fight any of the monsters. Supposedly, the difference btw these genres is that the estrangement in horror games comes from an external factor (the monster) where something is there but should not be there. In queer games, the estrangement is internal- the character is the factor to

be excluded from the environment.

Anyways, I spent so much longer on this blog post than I rightfully should have just to say that I want to watch horror movies. I'm going to get to work, now.

My bike tire is flat, and I realize that I don't know where to find a pump to fill it.

*Also, I want to say that all games, by necessity, have to have restricted mechanics. There's no programmer in the world who would actually want to program the player having complete freedom in a game. I mean, what would that even look like? So maybe this isn't a valid lens through which to look at video games.

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June 26th (Lambert)

 June 26, 2018  [mtruong](#)

In today's luncheon lecture, Eliot mentioned that we didn't really know what it meant to work hard. It's a bit of a provocative statement, but I think it's mostly true in my case; it's dispiriting to realize how little I accomplish in a day of work. I can work hard, but if there's no tangible results, I don't think I can actually claim to "work hard." I still don't understand swarming, and after meeting with Glenn and trying to sniff out the ports on these drones, things seem worse (the IP addresses and connections are more jumbled than what I previously thought). I know that we will be able to complete the project with a readily available worst-case scenario, but I don't want to resort to that, yet. However, I'm wondering if my time would be better utilized writing.

Luncheon lectures usually compel me to think about grad school. I often feel like the grad-school advice proffered by our lecturers is largely irrelevant to me, since (I think) it's more likely that I pursue an MFA. All the MFA students I've talked to don't discuss research- they talk about developing an artistic practice. Furthermore, getting a stipend/ being a fully-funded MFA student is nearly impossible (or at least, extremely difficult). There are some parallels between getting an MS and MFA, but the two paths seem strikingly different to me.

It seems like Ilan and Gabe are doing cool stuff with shaders. Proud of them! 😊

Things happening outside this program: We all went to a yoga class, today. I think it added onto my stress. I officially decided to be a peer mentor for the systems class. I also registered for the Grace Hopper conference today- I'm very excited to visit Houston again. I'm going to go on a bike ride, now.

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June 25th (Boxy)

 June 25, 2018  [mtruong](#)



Teandre made the wonderfully astute observation that my outfit today looked like Sailor Mars'. She also looks as mad as I often am. It's a good vibe. Tee also said he liked my hat. I'm currently plotting more outfits to wear with that hat. Stephen gave me a magazine about events happening in Ames. I think it's nice that he wants me to like this city. I really wish that the corn had grown by now. It's disappointing to arrive to Iowa and to not see grown corn fields.

We have a better outline for the paper and a methods to our experiment. Tom really helped with clarifying our experimental goals today. We need to alter our experimental methods a bit and write a pre-survey/post-survey for the participants in the experiment. Of course, we also need to understand how these drones are connected, and how they manage data streaming. I talked to Vijay and Paul about the network stuff, but I still don't know what I'm doing. I guess that's just research $\backslash_(_)_/_$.

For the deeper dive, we spent some time today looking at the last of the shader examples (didn't do shader optimizations, but the basic concept seems to be use less precise types if you don't need precision...). We're making an app for the C6 as part of our major course activity. I'm sure it'll be fun, but I feel like it's a pretty heavy investment on VRAC's part just to get a couple of students to learn about graphical clustering. We did get to see the computers that run the C6- I was very impressed that Glenn hooked up all those computers. It'd be cool to learn about computer hardware.

I just looked at the courses that I signed up for next quarter, and it turns out that I'm enrolled in networking. How did I not realize this? I feel like I live in a stupor 65% of the time (another 25%, asleep).

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June 22nd – 24th (Task Load Index)

 June 24, 2018  [mtruong](#)

Getting unmotivated in writing these blog posts daily. I'll try to do better next week.

Friday: Learned more about shaders. Learning mostly entailed copying code, so I'm not entirely sure how much I actually learned (I did realize that I type rather inaccurately- wondering if it would be better to just copy and paste the code instead of typing it out). I should look into shaders when I have the time and motivation (but when will that be?) For the drone project, I'm still having so much difficulty! Often, the people at the VRAC who could answer my networking/data-streaming questions are gone from the office, and so I struggle alone. I'm so frustrated that I might switch out one of my CS classes for Intro to Networking next quarter (far too late in the context of this project, but at least I'll know some of the answers for the questions I have, now). We have so much work left to do. I'm getting very nervous by how little we've accomplished and how much needs to be done. Also, shout-out to Tom, who apparently reads these blog posts. We had a good-bye dinner for Ohana; I hope she's doing okay.

Saturday: Went to Reiman Gardens with a couple other interns. I love botanical gardens- the Garfield Conservatory is my favorite spot in Chicago. I drew a lot of plants. A baby came up to me and handed me his parents' car keys. Another kid complimented my drawings. Another person complimented my outfit. It was a good time. I got my first milkshake from Freddy's- it was pretty good, but not exactly outstanding. After that, I worked a little bit.

Sunday: Continued working, but I haven't done nearly as much as I wanted to accomplish this weekend. I had a long conversation with my sister about her grad-student research in Zambia (she always laughs when I mention Iowa) and what we want in the future. I keep wondering why I place myself in situations that bring me closer to being a CS professional instead of using my time to involve myself with the art world. I also wonder why I continuously overload myself with tasks- it seems like my entire workload next year will be the same as the workload I had earlier in this program, when I was simultaneously doing my final projects and this REU stuff. Essentially,

it's going to be a bad time. I don't get homesick, but today, I really miss my dog.

Apparently, there's a way to get from lysergic acid to Mariana Trench in only 3 clicks: <https://www.sixdegreesofwikipedia.com/>

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June 21st (Medium-Specificity)

 [June 22, 2018](#)  [mtruong](#)

The weather yesterday was wonderful- today seems like it'll be a nice day, too. I am still frustrated with the project and my own lack of experience/expertise. Glen lent me a book about sockets which is helping me pin down the abstracted concept of networking, but it's not especially helpful in the specific problem I'm encountering (I'm understanding network interface naming a bit more, though). Still trying to get a live feed of the drone camera.

We had a lecture about the interview process, and I realize that I don't have a clear idea of where I'm going in life (really makes the "tell me about yourself" question hard). I do think I have a strong sense of self, but things like motivations and dreams feel a bit far reaching from where I currently stand. I could always make up a goal (like the lie I gave yesterday- become a gallery curator focusing on interactive art installations that use technology- I would never do that; curatorial work is hard and boring), but that seems like a good way to end up in a bad position in life. Like I said before, I act like I have a lot of time to direct my life, but that's not quite true (it is true, but it also isn't).

Afterwards, we went bowling. I learned that I'm fairly bad at it. I don't think I'll ever try again. Seeing the billiards tables reminded me of how much I miss playing pool with my friends.

Topic I'm currently thinking about: the time that it takes to put on eye make-up every day. Is it wasted time? I enjoy how my eyes look with eye shadow/eyeliner (obviously the reason I wear eye make-up), but is my vanity worth ten minutes of my life? A further complication- if I rush putting on eye make-up, the pigments/chemicals end up falling into my eyes by mid-day, making me cry. Ten minutes is the minimum amount of time needed. If I stopped wearing eye make-up, what would I do with my extra ten minutes of time? Sleeping for an extra ten minutes seems altogether useless. Maybe I would start eating breakfast.

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June 20th (Gears)

 [June 21, 2018](#)  [mtruong](#)

This will be a short post:

Yesterday, Gabe said I looked "lost and disappointed," which is a pretty accurate summary of where I am at my project right now. I think that this is just what research is like, and I just have to deal with being frustrated until I get another (minor) breakthrough. I'm doing shaders stuff for the deeper dive, which was probably a bad idea considering how little I know about materials/shaders. Still, at least I know that I'll be learning something.

I'm most worried that the problems I've been having with this project can't be solved by throwing more time at it, which is worrisome, since time is essentially the only resource we have. On a brighter note, the weather today (the 21st), is kind of wonderful.

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June 19th (Rapport)

 [June 19, 2018](#)  [mtruong](#)

I think I've been much more sassy than when I started this program, which is a tiny bit worrisome. I like the dynamic of my project group, but I definitely default to sass with them.

Today, during craft of research, I realized how much trouble I had articulating my project's hypothesis, and I realized that we needed a really concise explanation of what we were trying to discover with the drone research. Essentially, we're seeing how an operator interacts with a single-screen interface for a swarm of drones used in the context of a clearing operation- how the operator perceives their level of situation awareness and what their trust in the drone swarm system is like. That isn't a hypothesis, though.

Today, got some python code working that controls the drone. It doesn't help at all in the context of actually grabbing the live video and doing face tracking or getting two drones to fly from a single computer, but change is incremental. We're also working on our lit review stuff and trying to flesh out what we've read more.

Our luncheon lecture was about hyperreality and how images formulate reality. I'm thinking about the Pictures generation of American artists (Barbara Kruger especially), and how they "took" pictures/the language of advertisement to create visuals that directly pointed at the spectacle- how mediated images form our [lack of] social relations and reality. Hyperreality is a slightly different concept because fact and fiction are blurred, and so it becomes hard to exploit the fiction to point to itself. Sometimes, people will say that we live in a post-truth/post-fact world. I wonder what the social consequences of such a world is. The spectacle supposedly results in isolation, but this world seems to be about fragmentation (how different are the two?).

We designed our t-shirt today. It was a pretty stressful process. After that, I caught up with two of my friends.

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June 18th (Molehills)

 [June 19, 2018](#)  [mtruong](#)

Posting this a day later because I was too tired to write it up last night.

Research could be going significantly better; I know nothing about computer networks (would be so helpful to have taken Intro to Networking before coming here!) and so I'm encountering difficulties with connecting drones to one computer. Additionally, OpenCV (and by extension, GoCV), aren't installing correctly. So much of the work we do feels like being IT, and I'm tired of it. Sometimes, I really wish I had a Mac. I guess to fill in the gaps of what we don't know, we should start working on the paper structure/actually writing up the lit review (more than a spreadsheet w summarizing information).

Yesterday was the Unity workshop- it was pretty simplistic. Maybe tomorrow we'll get to piece a simple game together. I'm excited for the deeper dives.

Today is the day when we are supposed to officially receive our final grades for the spring quarter. I'm not worried, but I think that's super weird. I've gone through two years of higher education, and I know I have grades that make it look as if I'm proficient in CS stuff. Totally not true (hence all the obstacles in our research). Why is the education system like this?

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June 17th (Locus)

 [June 17, 2018](#)  [mtruong](#)

I almost forgot to write a post today, but these posts are getting monotonous because of the desolation that is Ames, Iowa. Daily updates might not be necessary. Kira and I saw a movie today and dealt with the aftermath of there being no Lyft drivers or buses running at 9:30 PM on a Sunday (I'm a bit aghast from this situation, and yet again question why/how anyone lives in this city). It was a good movie. I also got a sketchbook today.

Topic I'm currently thinking about: design and art. The two seem to be separate ideas (design can function outside the realm of art, as

in designing algorithms), but they are often closely linked. Design seems to be about composing elements for better functionality of a whole system. Art also requires the composition of elements, but the functionality of a piece of art is questionable. When we use design in art, what exactly are we designing for- how can you make a more functional piece of artwork? I want to say that a "good" piece of art will be able to communicate the artist's intent, and so incorporating design into artwork clarifies any message that the artist wants to convey through the artwork. However, that seems like an overly analytical, contrived answer, and it isn't how I approach my own art. I guess the baseline question to really ask is what art's function might be. After that, you can ask how to augment art's function through design.

I'm hoping that Ames will become more charming in the following weeks, but if it hasn't happened yet, I doubt it will anytime soon. Ames is humid and empty, and moths brush up against my legs at night. It's not nearly as flat as I wanted, nor nearly hilly enough to be enjoyable.

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June 16th (Competencies)

 [June 16, 2018](#)  [mtruong](#)

Weekends without homework are pretty lax (although I really shouldn't say that... I do have homework! Just a last self-assigned lab). My final grades are coming in, and I'm doing shockingly well for someone who didn't attend the last two weeks of classes. I'm rethinking my self-imposed full-attendance policy for next quarter.

Got my bike today! It's been a while since I last biked (probably a few years?), but it does seem like a skill that's easy to pick up. Can't say the same for my sketching skills; I think I need to get a sketchbook and some cheap colored pencils tomorrow and start practicing again. Seeing Val work on bikes was really cool- she's so knowledgeable. It might be time for me to start breaking things and putting them together again.

I'm happy! It's a nice alternative to being stressed. Iowa's humidity sucks, but the heat is nice. What a warm feeling.

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June 15th (Little Fires Everywhere)

 [June 15, 2018](#)  [mtruong](#)



I haven't yet named my model axolotl, and maybe she'll remain unnamed. It's nice to know that in a matter of 2 days, I was able to gain some amount of proficiency in Maya. In terms of the project, today consisted of a bunch of small fiascos: first, we received a second drone from Dr. Stone, but it didn't have a battery, so I couldn't work on programming a swarm. Then, I jammed the battery the wrong way into the drone (shoutout to Kevin, apparently the only person among the four of us strong enough to pull out a jammed battery). We also weren't even able to start with programming facial recognition into the drone because installing different libraries is murder. Today was very unproductive; it's starting to look like we'll have to ramp up things next week to make-up for our lack of progress today.

I also got myself into an academic bind- I'm likely going to be a peer mentor for Northwestern's Intro to Systems class (which is really cool! And I'm very touched that my teacher thinks I understand the material well enough to be a peer mentor). That being said, I don't have a thorough understanding of the last lab because I was so preoccupied with this REU stuff. The next two weeks, I'll be working through the lab so I can be a good peer mentor. Basically, I just gave myself homework for another two weeks 😞.

I bought a cake today. Weird how when you're an adult, you need to stop yourself from making impulsive decisions. I didn't stop myself this time. I'm currently plotting my next impulsive decision. I hope I enjoy the cake over the next week... I also made a vegetable/pasta casserole to eat over the next week. Cooking is an unenjoyable chore. Cleaning up after cooking is almost as bad.

I currently own three different types of milk (rice, almond, and skim). I don't understand why I live like this.

I got mangoes! I'm very excited to eat them.

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June 14th (Baader-Meinhof Phenomenon)

 [June 14, 2018](#)  [mtruong](#)

I'm thinking about *Invisible Man's* description of time as a boomerang. It seems like actions and ideas keep coming back.

Things I learned at Northwestern keep resurfacing throughout this program. Today, Stacy described her research in Bayesian networks, and she gave a brief overview of a couple machine learning algorithms. I understood the academic jargon, and I recognized the directed, acyclic graph from my mathematics of computer science course. In a research paper I read today, they talked about using neural nets to make a predictive VR interface for drones. I'm realizing that my education is relevant, that my teachers are doing a good job teaching me, and that I'm retaining information- the combination of the three is the most shocking.

Progress is slow in the drone project; we all have Go on our computers, and Inshira got a video feed to play on our computers- now we need to find a more convenient way to grab the video to do some processing and put it in an interface (maybe- I think we need to confirm with Tom and Dr. Stone if our project will require a controllable interface). I'm currently thinking that we'll have to use Python to program the drones. Not too bad, since I had to learn a bit last quarter. I'm trying to figure out how to get two drones to connect via wifi on just one machine- I know it's possible, but I also know that I have never done this before, and some guidance would be helpful. Days are getting longer at the VRAC now that there's more time on our own. It's kind of pleasant, to be able to schedule yourself.

The weather this morning was wonderful. It was windy, heavily clouded, and 60 degrees, just after a lightning storm. I wish all morning walks to the VRAC were quite as nice. I took a picture because I was so pleased.

Kira and I talked about art for a solid hour or so. I also mentioned performance art to Ahmed today. Weird, but I could talk about art all day. I'm wondering what that says about me and what I value.

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June 13th (Restoration)

 [June 13, 2018](#)  [mtruong](#)

I'm going to get a good amount of sleep tonight. Just the thought of how rested I'll be tomorrow morning is bliss.

I was able to catch up on the Bachelorette; I really love manufactured, reality TV drama. Real Drama in my life is always horrific, but television drama is so satisfying to watch. I kind of want to know why, though. I wonder if this would be a good research topic.

The drone project is a bit slow going- I figured out how to correctly install the Go language, but I have a feeling that the Gobot API used to control the Tello drones won't be enough to actually satisfy this project; we might have to dig even deeper to connect to three drones on one machine. That worries me, but it might also be fun. I just wish there was more substantial documentation out there in the interwebs.

We did some 3D modeling in Maya and Solidworks which was real cool- there's so many talented people in this program. I want to get good at 3D modeling, so there's a chance that I'll be spending a lot of time at VRAC trying to learn it myself. It'd be a good goal to have this summer. I also should get a sketchbook soon- it's only been one day of academic freedom, and I already find myself itching to draw.

I'm happy! It's a nice feeling. I'm excited to go in for work tomorrow (what a weird thing to say, but it's true!).

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June 12th (Last Night of Academic Suffering)

 [June 12, 2018](#)  [mtruong](#)

I was gratified to learn that this years cohort might be known as the "tired" cohort. I have a feeling that I contribute 80% to this perception with my blog posts; it seems like the majority of this group actually gets their 8 hours. Good news! After tonight, I'll (probably) be able to participate in that well-rested group. But not until after tonight.

Things I want to do once my school work finally ends: Start a new sketchbook. Finally finish *Infinite Jest*. Learn to make eggs benedict. Picnic at Ledges State Park (only an hour away by bike!).

Today is the last day that I'm going to make a serious, concerted effort towards my memory allocation lab (as an assignment). It's probably going to exhaust me, especially in regards to tomorrow's work (of which there will be a lot), but it might be worth it. I think I'll take the time to understand this lab assignment further this summer, even if I fail it, now. I'm really happy that all my schoolwork is almost done, though. My stress has almost completely evaporated. I'm sure it'll be replaced, soon, with an incoming flood of REU work, but any interstitial tranquility would be much appreciated.

I'm setting up the Go programming language on my laptop- the last thing I have to do is set the GOPATH, but I don't actually understand how to do it. Once that's done, though (and I have a feeling it's a fairly easy process), I'll be able to import the libraries that allow the Tello drone to run. If it fails, I think we'll move on to using Scratch.

I really enjoy keeping this blog. I used to keep a journal, but I mostly learned how circular my thoughts and behaviours are. This blog might be different- in the future, when I look back through it, I hope that I get a clear indication of my personal growth.

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June 11th (Thinking about Truth)

 [June 11, 2018](#)  [mtruong](#)

I had my final today for the Intro to Systems class today and just received my grade (it's so weird how scared I get when I check my grades! Also strange how quickly teachers can grade tests. Having heart palpitations). I did fairly well! Worst case scenario, I'll make an A- in the class. I might actually be a peer mentor if I can crank out a working explicit free-list memory allocator in the span of two nights (I might have to pull an all-nighter tomorrow to get that working, though). I'm doing my art history final tonight; it involves so much writing. I'm still very tired, but the end is in sight, and I'm hopeful. I can honestly say that the stress of doing classwork/finals and REU work has been worth what I'm receiving from this REU. I hope that my past two weeks of bleak blogs doesn't discourage Stephen and Eliot from taking in other students under the quarter system the following years; even though it's been tough, I've felt incredibly productive the past week, and I think I'm learning a lot.

Today, we learned how to use SolidWorks. I'm pretty terrible at it, but I just started learning, and I feel like my incompetency is driving me to want to do 3D modeling. We also had an hour meeting with Dr. Stone and Tom again; they gave us a new drone to program (looking at the code, it'll be pretty simple to hack into it). This meeting leaned much more serious than the previous ones, and I'm starting to feel the pressure ramp up. They questioned all of us on our coding backgrounds. Despite having taken more than a few CS courses, I feel incredibly deficient as a programmer, and I'm wondering if this is just imposter syndrome or if I'm actually accurately judging my coding abilities. It took me about 4 years to get good at art, and I'm into year 2 of programming. Do I actually have to work two more years before I feel like a competent programmer? That seems like a long time to be mired in self doubt.

My final art history essay is going to be about art and truth.

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June 10th (Uninteresting Update)

 [June 10, 2018](#)  [mtruong](#)

I received my test from my Machine Learning class; I did as abysmally as I thought (a little bit worse than that, actually). However, there's still a chance that I'd receive an A in the class... grade inflation is real at Northwestern. I have my systems test tomorrow. I'm actually being kind of chill about it- I'm currently studying, but not with any sort of intensity. Unfortunately, it looks like I won't be getting an A in the class, so I probably can't be a peer mentor for it next year.

I have an art history final that involves four pages of writing due next week. I have decided to hate art history and to never take another class of it. I've lost all sense of urgency today regarding my finals and grades. That's a good thing, though. I'll be able to focus more on my research project, especially since we're receiving drones on Monday or Tuesday.

Some of the things that I thought were most fun about the systems class: memory translation/looking up things in caches... it's very systematic. I also like the straightforward nature of structured data/memory alignment. Learning about assembly was mediocre at best, but I do appreciate the step by step way that you have to approach it. I actually wish I could take this class again, just so I could be in class for the last part of it and thoroughly understand memory allocation.

I couldn't get a bike today, but I will sometime next weekend.

Right now, I'm thinking about the way that I structure group projects and assignments. I think that the way that I handle group work is ultimately too stressful for me, and I don't even like managing people/overseeing work. But I also hate presenting work that I know could be better.

Well, wish me luck on that final.

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June 9th (Time is a Limited Resource)

 [June 9, 2018](#)  [mtruong](#)

Today was the ropes course; we started out with a bunch of communication/teamwork activities. At first, I was too tired to really care (see my earlier post today), but the course quickly became fun- the swing had the same drop feeling as riding a rollercoaster (which reminds me- I want to visit an amusement park soon). We also did climbs. I'm frustrated because I couldn't make it to the top of the hard climb. I'll probably never head back to that place to complete it, but I can make use of the rock-climbing wall at the gym. Overall, it was a good time.

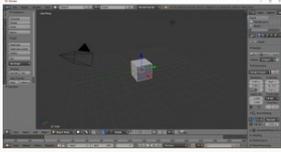
Afterwards, I spent a little time working on homework, and more time completing chores. I cooked meals for my next week, but it took me three hours. I'm really not great at managing my time. Tomorrow is going to be hell, essentially, as I try to wrap up my final/studying for my other final. At least my pasta turned out pretty well. I'm tired enough to go to sleep, and I don't feel panicked enough about all the work I have to do to stop myself right now.

I'm sincerely trying to write a blog post everyday (although I'm sure that won't be feasible starting week 6). I can tell that tomorrow's post is going to be incredibly dry, though. Maybe I'll talk about computer systems.

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June 8th (Too Tired to Think of a Title)

June 9, 2018 mtruong



Some Bad UI: Blender interface. I have no idea how to use this program. I think for everything you can do on the GUI, there's two ways to do that action using keyboard shortcuts. It's incredibly cluttered. I'm not sure how anyone learns to navigate this program.



Photoshop: Slightly better, but not by much- has a steep learning curve, and not all of the icons are intuitive. I think it took me a month and a graphic design class to get the hang of this program.

Yesterday, I realized how exhausted I am. After being tired from work stuff, I went to Walmart to grab some groceries and cooking supplies (I finally have a knife!); immediately after putting away my groceries, I talked with my friend for an hour about our memory allocation assignment. Then, I decided to take a short nap- but I severely overslept (probably bc I was too tired and set my alarm incorrectly). I don't really know what to say other than that I'm really, really tired, but I also don't have time this weekend to catch up on sleep. I have my Intro to Systems final on Monday, and I'll be studying for that (and finishing my art history final) all weekend. I really hope this is the nadir of my exhaustion; I don't think I could handle being this tired for another week.

A non-exhaustive list of foods that I like:

Jambalaya, Gumbo, Flan, Lobster, White-Chocolate Covered Pretzels, Baked Lays Chips, Crepes, Really Good Strawberries (but they have to be Really Good), Mangoes, Birthday Cake Ice Cream, Most Americanized Chinese food, Soondubu Jjigae, most of the things you get at Dim Sum (including Chicken Feet, Shrimp Dumplings, Shumai), Korean Fried Chicken.

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June 7th (Merge Commits are Murdering Me)

June 7, 2018 mtruong

Tough news; I didn't finish my machine learning homework (only one more question left to solve, though!). I also realized that I have an additional final to work on next week. The work is never-ending; after research, I jump straight into homework. I just tell myself that everything will be over in a week.

I wore my Dillo Day hat (Dillo Day is Northwestern's annual music festival) to mourn the fact that I couldn't attend this year- Young the Giant played, too, so I was really kind of pissed to have missed it.

My CS partner has diligently been working on the memory allocation lab. I really haven't, but somehow, when I pulled today, there were a lot of merge conflicts. Sometimes I hate Github. Anyways, I'm really proud of her hard work, but I know I should be working on this lab, too.

Today we received another HCI lecture. I took HCI this year, and it's interesting to see the difference between Dr. Gilbert's lectures and my professor's. We also got a lecture about the future.

Before I left Northwestern, I explained my future worries to my favorite MFA student. He told me that if I was serious about being an artist, I should be open to any situation, but that I need to be intentional about pursuing art opportunities. I'm worried that I'm not willful enough to be an artist- the stability of computer science is really alluring. There's such a strongly defined path in CS: study data structures, be able to answer these type of interview questions, get your bachelor's and get an industry job. Art is nebulous and intimidating- there's no real path, other than get an MFA (even that's debatable). I feel like this internship extremely diverges from art, and I'm worried I'll just fall into the already tread path simply because it exists.

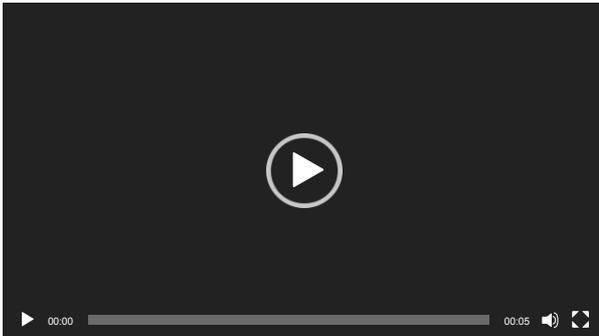
People keep telling me to be interdisciplinary- that art and CS aren't diametrically opposed, and that I should incorporate both into my future career. I don't trust that advice: to me, it always reads as "become a programmer who does some design stuff- UX or UI," never "be an artist who uses code" (which is what I am right now). I'm also worried that my indecision prevents me from accessing my full ability in either field.

I keep telling myself I have time, but that's not quite true.

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June 6th (Making Bank)

June 6, 2018 mtruong



Today involved a fun amount of rain. I think only in the rain do I regret having poor eyesight; it's so hard to run in the rain when you can't see anything. It was my first downpour in Iowa, but it wasn't bad. I think there's a kind of camaraderie shared in the misery of having to endure heavy rain together.

I'm going to finish my last Machine Learning homework assignment tonight (I think... there's only one question left that I'm kind of iffy about) and work on that final project report. I also need to study for my Intro to Computer Systems final. My teacher graciously offered me a TA-ing position for that class, and so I really need to do well on this final (more because I don't want to disappoint him rather than because I want to make an A in the class). It's weird how much more motivated I can be for a class when the teacher is encouraging.

Today, we learned some more about C++ programming. The assignments have increased in difficulty, and there's a bug in my code that's currently annoying me, but I don't have the time to solve it yet. The literature review is somewhat of a slog, but it's necessary. I think that our idea will become clarified by the end of the week.

Today, it also struck me how much I like this cohort of interns and my project group. I spent some time last night going over some past intern's blog posts, and it's interesting to note the change from the beginning of posts to the end. There seems to be whiffs of trepidation and clumsiness in the beginning as interns figure out their projects, and then the posts get really short (probably because they don't have time to blog). The end feels like an emphatic stop, though- no resolution or reflection. I want to see where the past interns are, now. How they feel like this experience has helped (or hindered) them in their adventures. I really hope that in the next 8 weeks, I'll like my future self.

Finally, we got our paychecks today. I can't wait for this money to be deposited... I think I have to actually buy a pot, pan, and knife to cook with. Evidently, I'm the only person in my apartment who'll be cooking this summer. This might be a good summer to bleach and dye my hair.

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June 5th (Back to Thinking About ML)

 June 5, 2018  [mtruong](#)

After the lecture from Professor Wright about bio-fuels and actually completing some of my machine learning homework yesterday, I'm back to thinking about machine learning. I, surprisingly, was able to compose a data-set of 1000 examples that performed poorly on the nearest-neighbor algorithm and perfectly on decision trees. (Also did well on naive Bayes and poorly on multi-layer perceptrons, although I'm not sure how...) Foolishly, I actually typed in every single example (so 1000 examples with 5 attributes each... 5000 items to type in). It's dumb. I'm a CS major, so I should be able to quickly write a script that makes a CSV file instead of typing it all by hand, but I'm too lazy to actually learn how to use a script to output a CSV file. ☹️

Professor Wright mentioned genetic (tree?) algorithms. Unfortunately for me, that was the topic on the (only) day that I decided to skip my ML class (in addition to all the classes I'm skipping by participating in this REU). I kind of want to go back to look at the genetic algorithms. I keep thinking about all the information in class that I'm missing by doing this REU, and I'm getting frustrated by it. I'm not an intuitive or gifted programmer, and I didn't start programming until I entered college; I've always felt behind my peers at my university, and so I need to thoroughly understand these concepts just to keep pace. In a way, this REU is simultaneously wrecking and facilitating this goal. My GPA will be dead this quarter because I don't understand a third of the material from class, but I get practical coding experience (if you count research as practical). It's taking a step back and then forward.

The next few days will consist of little sleep b/c I have to push out the last of these assignments... two short responses, a final project report, a final, and that last, dreaded lab. Aside from me ranting about my schoolwork...

I'm horrified by how lost I get- yesterday, I couldn't figure out how to get to a grocery store, so I think it took me a full hour longer than was strictly necessary. The bus system here is incredibly inconvenient (although they do seem to adhere to schedule). I'm surprised that I got so lost because I usually navigate myself well in cities, but this is a different sort of environment. I'm very excited for when we get our bikes (if we ever do). I plan to bike for a really long time, get terribly lost in a corn field somewhere, have a picnic, sketch all day, and then spend all evening (and night?) navigating my way back to IA State.

I tried the rock-climbing wall at the gym for the first time today and was surprised by how difficult it is to climb. This makes me worried for the ropes course this Saturday. Inshira also gave me some tips on how to play basketball. I got my picture taken today! I dislike it, but I'll live with it. I got an official email saying that my school would pay for my trip to the Grace Hopper Conference this September- I'm excited to see more women in tech and visit my sister in Houston. Finally, I'm kind of worried about my roommates- they've been here for a few days, and none of them have any food in the fridge. Are they eating? I really hope so.

Per Stephan's post, I'm also curious to see who's reading these! If you get through reading this ridiculously long post, you should comment with your pet's name, or a pet that you'd like, and ask me about my dog. I'll show you pictures of him 😊

 REUJ2018  [2 Replies](#)

June 4th (Getting Back into C++ Programming)

 June 4, 2018  [mtruong](#)

First, my team and I went to a really overpriced dining hall at Iowa State- I will never make that choice again. It was a foolhardy decision, and I did not get to eat \$13 worth of Iowa State Dining Dollar's- all I have left from this excursion is a single banana.

The first programming lecture was very simple, but then again, it was the first one. I'm waiting for the programming problems to ramp up in difficulty and for me to get lost. I also looked at some of the documentation for Tello Drones and the Go language- I think it's ridiculous, the small syntax variations between each language. Go uses := to initialize and set a variable to a value. It doesn't need to be this way.

The Drones team talked to Dr. Stone today- he's such a gregarious individual. I feel like I have to watch the questions I ask around him, though, since every question results in 5 minutes of explanation. At least he's extremely open to being helpful. I think that the literature review is going to be somewhat of a slog, but it's important work.

I'm thinking less about the schoolwork that I have to accomplish; for the most part, my grade has been cast (with the exception of the memory allocation lab). After that, I'm pretty much free. I can't wait to devote most of my time to this program (and sleep).

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June 3rd (Still Thinking about Machine Learning)

 June 3, 2018  [mtruong](#)

I'm still thinking about machine learning for my last homework, and memory allocation for my last lab, and I'm realizing that I still have a lot of stuff to dig into for the next week. I don't feel quite as stressed though (after failing my machine learning test, I don't think there's much else to worry about). I think everything will turn out okay. At least, I think I'm going to be a lot less sleep deprived next week.

My roommates arrived! I enjoyed having this apartment to myself, but it'll be good to know that there are other people in this place that I can hang out with. Also, they said they're doing a project about forensic analysis, which is real cool. Hopefully, this apartment will get a little more furnished (with regards to cooking utensils... I still need a knife). I also need to hop over to a grocery store and get some food.

I'm really looking forward to this summer. Shoutout to anyone reading this- so far, you've all been pretty cool, and I genuinely enjoy your company. Kind of dumb, but I was worried I'd be spending my 20th birthday alone, but I don't think that'll be the case anymore. I think I'm going to be a substantially better programmer at the end of this summer, and I'm really excited to get to see the things that my colleagues make.

I'm gonna do a little more homework for now, and get some sleep. I'm ready for programming classes, tomorrow!

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Thinking About Machine Learning

 June 1, 2018  [mtruong](#)

It's only to be expected, considering that I'll be doing my test for that class tonight. I don't think that I'm missing a lot of the class information, but I do wish I could ask questions to my professors in person. I don't think I'm really grasping all the ML classifiers and algorithms- I can kind of describe naive Bayes Classifiers, but not to the depth/extent that I want. Doing classwork and this REU has been more difficult than I originally anticipated, but I think the idiom "you made your own bed, now go lie in it," is really applicable to me right now. Speaking of beds... I really can't wait until I

can sleep at reasonable times (hopefully in a week from now... but at worst, two weeks from now). My roommates still haven't arrived, but I enjoy having the apartment to myself.

Looking at the VR HMD's reminded me of my work-study job at Northwestern. I initially came to this REU with the intention of learning more about VR (that's what I told my manager, who wrote the rec to get me here), but I'm wondering if I should do something different. When Vijay described the costs of running the C6, I found myself incredibly skeptical of the value of VR- sure it's a cool technology, but I don't know if VR is worth quite that much. I think exorbitant costs are just a part of research, though. In a couple of years, there'll probably another C6 that costs a fraction of the cost to operate.

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