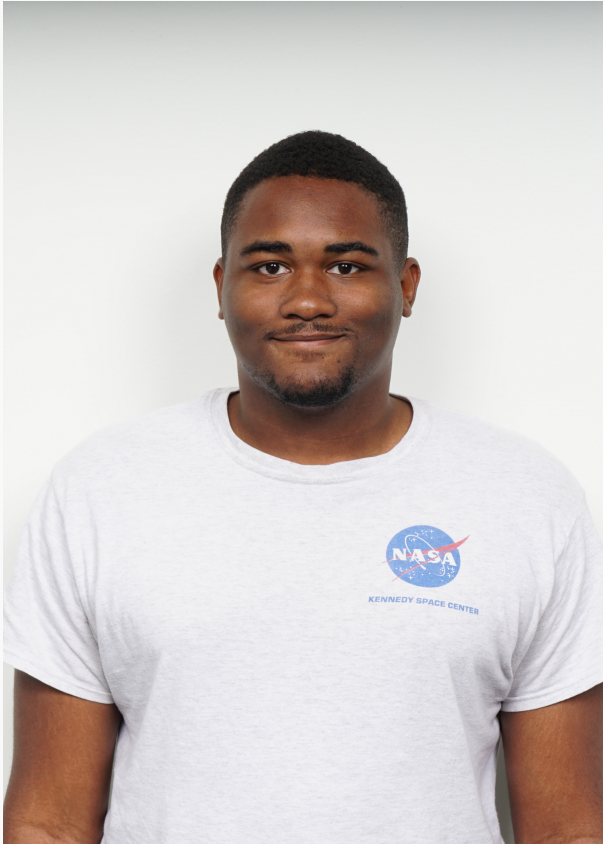


# Teandre Roberts

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## Teandre's Post: Blog Catching Up

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 August 1, 2018  teandrerr



Since I've been slacking on the blogs since 7/26 have a blog for each day leading up to day.

### **7/27 – Billiards**

On Friday we made the order for piano wire so that we can clean the biosensors. Aidan and I also went to the Sukrup lab with Cicero so we can see if we can use water to clean the interior of the microfluidic channels. Loreen also helped supply us with chemicals to clean the interior but they proved to be ineffective.

For our meeting we presented our poster to our faculty advisors and grad mentors where they gave us valuable advise and constructive criticism.

For the final part of the day Victoria, Leilanie, and I went to go play billiards at memorial union. And it was actually really fun Mary later joined us.

### **7/28 – Bikes & Movies**

On Saturday Victoria, Leilanie, and I returned our bikes to Val. In the process of getting there we all got lost and someone got hurt BUT other than that we managed to make it there. Where I had a breakfast crepe from the local restaurant there which was really good.

Later in the day Aidan and I baked a spice cake which tasted amazing. Like the exterior was a cream cheese frosting and the cake had a crunchy shell texture but the actually interior was soft and tasted like a cloud that melted in your mouth.

At night Leilanie, Victoria, and I were going to play bowling, but despite the hours saying it was open it was really closed. So we got Chinese food and watched Mary & the Witch's Flower on Netflix. The movie felt really similar to Ghibli films, but for Studio Ponoc's debut film it was pleasantly good I liked it.

### **7/29 – Adventureland**

On Sunday Angelica took me, Stephan, Mary, Aidan, Kira, and Victoria to first a breakfast place that serves good smoothies but frozen breakfast sandwiches. Then immediately to Adventureland. The park was actually really fun despite the Dragon coaster hurting my jaw. We got to ride the Outlaw coaster and another ride 4 times in a row. The monster was the best ride in my opinion. After leaving the park at 9pm we went to this super crowded McDonald's that took like 30 minutes for us to just get one of our meals it was horrible. Other than that today was an amazing day.

### **7/30 – Bowling**

On Monday we mainly just worked on the paper more. Later that day Ahmed, Kira, Leilanie, and I went to the store which somehow sparked conversations about putting rings on fingers because of a Cardi B song. Later that night we played bowling and Victoria joined us. Despite me being trash in the game and Leilanie having to teach me how to roll a ball properly I managed to win with a strike.

### **7/31 – Poster**

On Tuesday Dr. Gilbert gave us our final luncheon lecture which was an enjoyable one. Afterwards our whole biosensor group went to the Sukrup lab to clean out the biosensors with the guitar wires. We managed to clean out our tiny parts so around four of them. Later we returned and finally got our poster which looks amazing in person. It's also slightly larger than everyone's else for some reason, but I don't mind at all.

### **8/1 – Happy August**

Now today on Wednesday we have exactly 3 days left until we leave Iowa. I'm bittersweet since I met so many great people and got to use technology that isn't available at my school. However I'm missing Florida and it's daily storms and beaches and seafood and Hispanic food especially Puerto Rican food my goodness I miss it so much. Today I don't really have much planned for today other than working on the paper.

That's all I have for today see you soon.

 [REU|2018](#)  [Leave a reply](#)

## Teandre's Post: RAGBRAI

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 [July 26, 2018](#)  [teandrer](#)

*Dear diary,*

The past days have been very fun and productive. Aidan, Kira, Victoria, Leilanie, and I rode our bikes to RAGBRAI and there were soooooo many people there. A bunch of food and beer stands plus multiple concerts happening. Oh and there was a lot of tents I wasn't aware it was this much of a big deal in this city many people said 20,000 people who aren't from Ames comes here to attend.

The next day we finished the poster(there's two placeholder pics but they actually fit with the timeline at the moment). At our meeting tomorrow we're going to practice our presentation for Dr. Gomes and Dr. Claussen so they can give us feedback.

We also printed all our 3D parts and is waiting for one of our graduate mentors to give us piano wire so we can clean our biosensor parts.

Last night me, Ahmed, Leilanie, and Victoria played video games last night which was interesting. Ahmed played Kirby and Mario Kart for the first time on my 3DS. Leilanie and I started playing Just Dance which resulted in a chair being knocked down. She won in Despacito and I won in a Hatsune Miku song. I also developed my first app even if it was super simple I'm still super happy it's a pleasant start.

Now today I'm most likely going to be working on the research paper and later working on the app.

That's all I have for now.

## Teandre's Post: July 23rd

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

*Dear diary,*

I changed the layout of the poster for like the fourth time listening to the feedback of Dr. Claussen. Now we need to wait for the other parts to be printed so we can clean them and test it out in the lab. Add those results to the poster and the paper.

The weekend was also enjoyable on Saturday we went to West Des Moines and did some shopping at the Jordan Creek Town Center. I managed to get a new outfit and bought two old Pokémon games (Pearl and White 2). I've been loving White 2 I chose Oshawott the water starter for that game.

On Sunday I went to the hackathon and started to learn more about app development. The only major issue that occurred was that since I'm not the administrator of the iMac I wasn't able to build the apps for the iPhone.

I'm also kinda disappointed that the longest lunar eclipse recorded is about to happen and North America won't be able to see it, but other parts of the world will get to see it.

 [REU|2018](#)  [Leave a reply](#)

## Teandre's Post: iOS game & REU the anime

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

*Dear diary,*

For our research a lot of progress has been made. We finished the rough draft of our poster with information on it and sent it to our grad faculty. They'll be giving feedback on it at our meeting today.

Our paper has also made some more progress for it to be submitted as a rough draft. We also have to print out four parts and test those soon so we can add their results to the poster and paper.

Austin also helped me set up controls for a game for iOS so I can create an app on Sunday's hackathon. So I have a working multiplayer game on my iPhone right now. I'm thinking of making a single player app for the iPhone and making a multiplayer app for my iPad. So I need to start setting up for that.

OH and I also used an app to make some of our REU photos into an anime.

The app on iOS is called Anime Sky. I'm not sure if there's a version on Android.



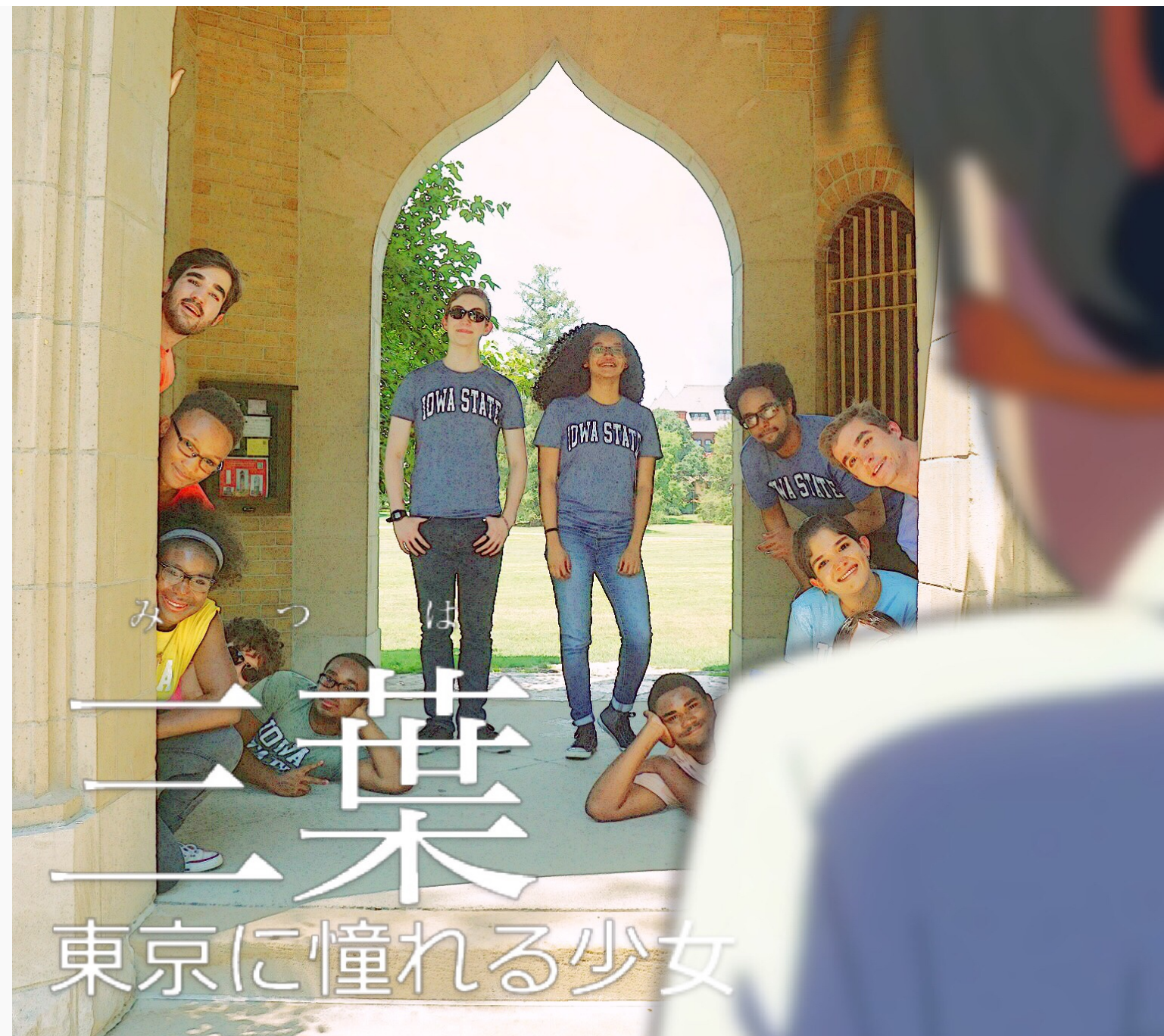


















📁 REU|2018 💬 1 Reply

## Teandre's Post: COMSOL

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 July 18, 2018  [teandr](#)

*Dear diary,*

Yesterday we had a cool luncheon lecture with Alex as the speaker. He showed us his many works with art and sound, and how he incorporates both to better society. I managed to network with him after the lunch.

Most of yesterday and today has been learning COMSOL. The learning process hasn't been difficult yet since I managed to solve the major issue holding us back. Now I'm just creating this study that's taking so far 12 minutes to create a 30 seconds animation so we see how particles go through the channel created on COMSOL. Once the ideal part is created I'll export it and send it to Solidworks where we can have a mesh over it and have it ready for 3D Printing on the high resolution printer.

That's all I have to see you soon.

 [REU|2018](#)  [Leave a reply](#)

## Teandre's Post: July 16th

---

 July 17, 2018  [teandr](#)

*Dear diary,*

*Yesterday's rating: 9 out of 10*

Yesterday we met with our grad student so he can look over the progress of our poster and parts. He suggested that our methodology should be formatted in a way that shows that our current progress in research is a cycle. The current cycle we've been doing work is first COMSOL, then Solidworks, next 3D-Printing, and then testing after which we return back to COMSOL.



Afterwards Aidan showed the fourth iteration of the parts and our grad student suggested that at the exit of the tubing we should split the channel in a way that heavier particles exit differently from smaller particles.

After work Leilanie, Victoria, and I went and bought dinner to eat outside and just hang out. We played UNO with 21 cards each and a game called Werewolf. Later, we went in Ahmed and Aidan's dorm to hang out there. Then later that night we watched Kill Bill.

And that's all I had for yesterday.

 [REU|2018](#)  [Leave a reply](#)

## Teandre's Post: FRANCE WON THE WORLD CUP!!!!!!!!!!!!

---

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

*Dear diary,*

FRANCE WON ON SUNDAY SO IM HAPPY!

On Thursday Aidan and I began learning COMSOL. It was going well until the we had to create a trapezoid in the program. The whole program decided to convert the final segment automatically into meters despite me always clicking millimeters. So now I have to contact the person who sent us the program about why COMSOL does this. Later that night Leilanie, Ahmed, Victoria, Aidan, and I went to a Jive concert.

But let me spill some tea about how I learned who the fakes are in this group. Ahmed and I said we were going to get food and when we return everyone decides to ditch us the audacity of it all. Victoria sent a fake blurry cropped out photo of a playground thinking it can fool us. Luckily karma came for them and put them on the wrong bus. So I'm content.

On Friday our group began creating the research poster and we have a basic layout and color scheme now. After which we had a meeting with our grad mentors and faculty. We updated them on our progress over

the week. The things we hope to accomplish this week are begin 3D printing our 6 parts, finish research poster, & finish learning COMSOL.

On Saturday Ahmed, Aidan, and I went to the comic book store and then a Chinese restaurant to get food for dinner. Later that night we all including Stephan had an anime night where we finished Mob Psycho 100 and parts of Darker than Black.

On Sunday I did mid-Summer cleaning and watched the World Cup final of France vs Croatia. I was so excited when France won wished I was in Paris to celebrate the win.

Now here we are on Monday. Today I'm going to be doing more of the research poster and try to submit a draft to Dr. Gomez by Wednesday so I can get her feedback on it.

And that's all I have for now.

 [REU|2018](#)  [Leave a reply](#)

## Teandre's Post: July 10th

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

*Dear blog,*

*Today's Rating: 9 out of 10*

First off FRANCE IS GOING TO BE IN THE FINALE OF THE WORLD CUP either against Croatia or England we'll see tomorrow who advances as well.

This past week has been a productive one since we finally got to present our deeper dives. I actually enjoyed the 3D printing group with the things they created my favorite was probably the brain and the adaptable ankle brace (mainly because I love the medical background behind both parts).

Our group presented a scary maze using the oculus and unity. We got a few jump scares in it. Thank you to Stephan and Stacy for being our first players of the final game, and all other people who tested beforehand.

Leilanie and I have also been trying to plan the trip to Adventureland as a final group event for the interns. And that's going really good we currently have 13 people who said they would come and we need at least 15 to get a groups discount on tickets.

I've been communicating with my friends and family back in Florida. They all had gotten ready for Beryl, but it seems it's going to curve away from Florida when it reforms so that's good.

And to end off this blog a geography fun fact. Around 17% of the Netherlands' land has been reclaimed from the ocean and lakes.



1300



1900-2000





 [REU|2018](#)  [Leave a reply](#)

## Teandre's Post: Vive la France

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 [June 30, 2018](#)  [teandr](#)

*Dear diary,*

*Today's rating: 8.5/10*

My week so far has been a very good one. I've been reading some more research papers to help me get a finalized idea of how to approach one in a more refine way. Aidan 3D printed a part but it didn't really come out as successful as we hoped there were air bubbles in it.

The deeper dive is starting to give us strange bugs when it comes to controls. Aidan and I are trying to work out those kinks while Inshira and Leilanie are working on the maze and creating cool gimmicks. So in total the progress is going good.

I'm very happy that France won its match against Argentina today the final score was 4-3. I'm not happy that one of my headphones died in one ear so now it's uncomfortable to listen to stuff.

For some reason lately I've been having much more free time so I think I'm going to continue learning and practicing both Spanish and French.

That's all I have for today update you all soon!

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## Teandre's Post: Space Game

---

 [June 27, 2018](#)  [teandr](#)

I wake up wondering what if people DONT like the game we make and everyday it haunts me.





Well anyways, Leilanie, Inshira, Aidan, and I all decided on a space theme game with multiplayer. I don't want to give away too many details since I want it to be a surprised but believe me it will be out of this world!



The past few days have been very enjoyable Kira taught me more dance moves of the youngins. Eliot gave us a really good lecture that I enjoyed. I'm happy that France made it to the Round of 16 in the World Cup hopefully they'll win the World Cup even tho I wouldn't be upset if Mexico won this time.

I've still been planning on my own personal rebirthday after reading about the concept like 4 months ago.

Um what else can I talk about. I've been enjoying the presence of everyone. I've hanged out with a majority of the interns but some not yet hopefully that'll change before the program is over.

What else is there. The biosensor project we talked with our faculty advisor about a part we made and she gave some really valuable insight on how to handle this project.

I think that's about it. I'm still not homesick yet but I do miss my friends. Even though there's a lot of nature things to do in Ames it starts to get boring going by myself since almost everyone is busy. I saw that Ames has 2 art museums so I think I'll visit those this weekend.

That's all I have for now.

 [REU|2018](#)  [1 Reply](#)

## Teandre's Post: Jupiter

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 [June 23, 2018](#)  [teandr](#)

This week has been a very eventful on Thursday we celebrated one of the interns birthday. Even tho I didn't play bowling with majority of the interns I did play in the arcade and lost in almost every game. All except for one skee ball and air hockey match with two interns.

On Friday one of the interns and I began designing a shooting game for VR and we made some good progress. After work all of the interns and I had a pizza dinner for one of the other interns. It was an enjoyable moment.

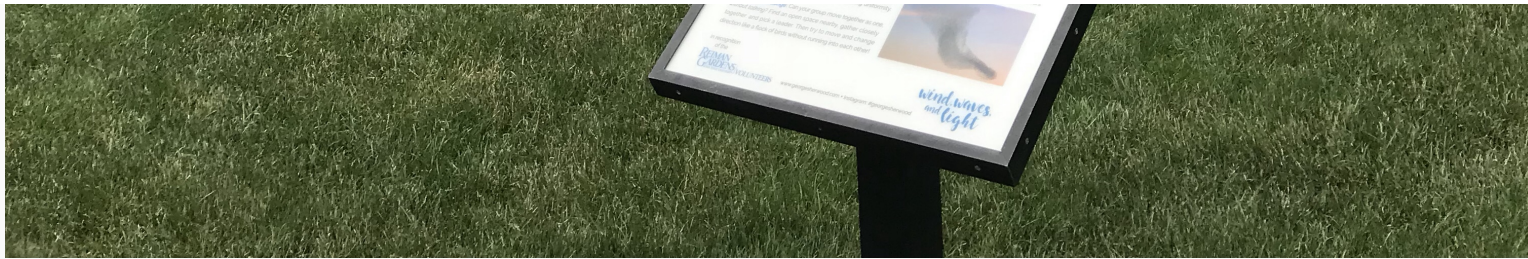
Today I rode my bike all the way to the farmers market only for it to begin closing so I was low key mad, but I went to Reiman's Garden afterwards for free and it was pleasant. I liked all the futuristic gray chrome object thingies they have scattered around the garden. After that we went inside the stadium and walked around.



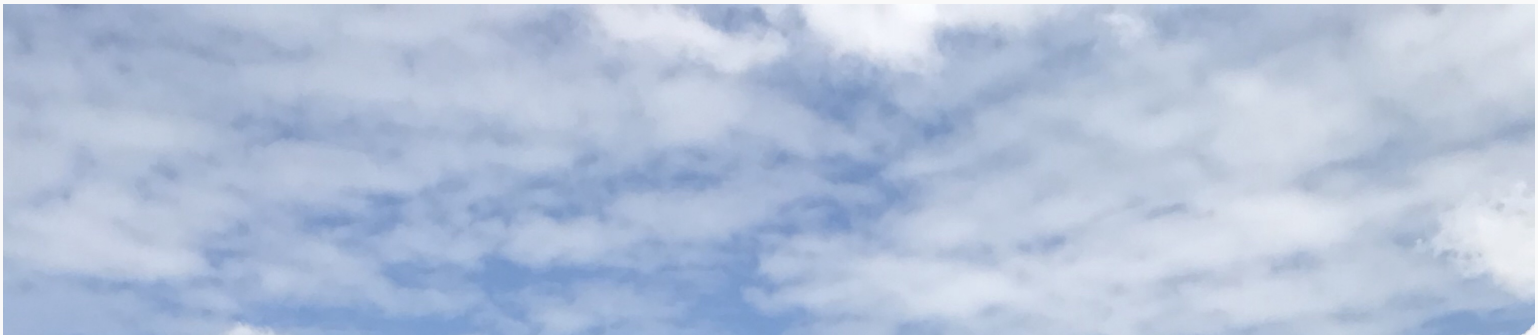














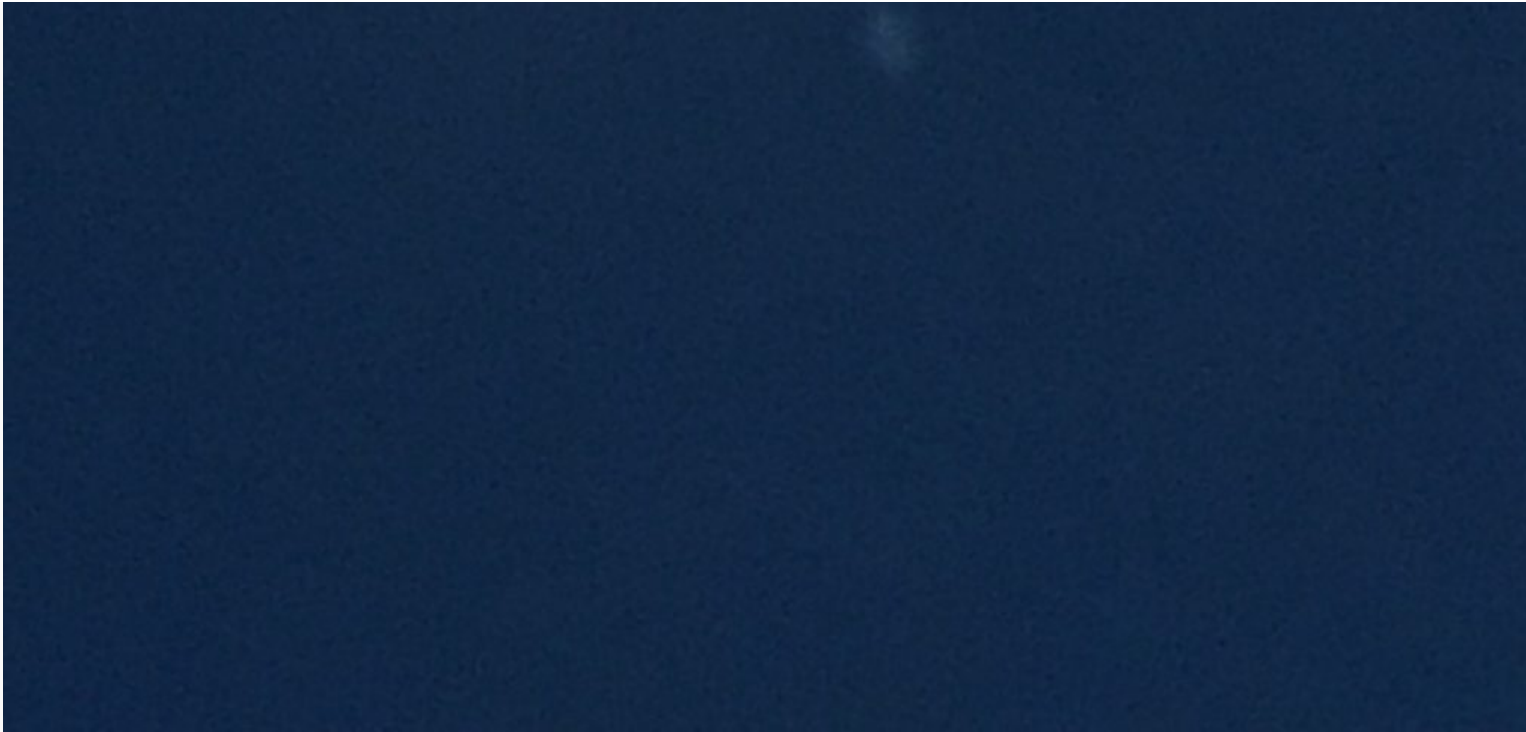




After wards later in the night I went stargazing since the temperatures were cool and looking at space puts in a very tranquil state of being. I noticed that you can see Jupiter even tho it looks like a Star in the sky.







 [REU|2018](#)  [1 Reply](#)

## Teandre's Post: June 20th

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 [June 20, 2018](#)  [teandr](#)

A very late at night and might be short blog, but I enjoyed today a lot because we got assigned our deeper dive project. I got placed with Immersive Virtual Reality which is what I wanted since I've been here. The first meeting we got to go over what immersion is and talk a little about the platforms we'll build the application/game for. That's about it but I'm excited for our lecture speaker tomorrow everyone says she's amazing at interview and public speaking which is two skills I can definitely improve on.

## Teandre's Post: Juneteenth

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

(My daily blogs are underneath this post of today.

Fun fact: Today is Juneteenth or known as Freedom Day. It's an American holiday that commemorates the abolishment of slavery in Texas & the remaining confederate states. It's recognized as a special holiday in 45 states and celebrated mainly by African Americans and Mascogos( descendants of black seminoles in Coahuila, Mexico). It's usually celebrated with cook outs, fairs, rodeos, historical re-enactments, parties etc. Texas was also the first state to establish Juneteenth as a state holiday.







On Saturday I went to hangout at the mall and I got a ton of stuff at a cheap price due to sales.

On Sunday I went hiking in a park right next to our apartments. Most of the trails were muddy and I saw a group of teens diving from the bridge into a really dirty river. I almost fainted from heat exhaustion because I forgot how hot it would be that day and didn't bring water. Other than that it was enjoyable a lot of quietness and peace.

On Monday we finally began to learn Unity which I loved since I want to become a game developer in programming, art, & creative directing. I've been waiting for us to start Unity for so long.



Today we had an luncheon lecture that was about hyperreality and I LOVED it. The whole concept and study was very interesting to me of what is real, digitally altered, and digitally created. Later on today we're going to be designing T-shirt's for the REU so I'm excited for that.

 [REU|2018](#)  [2 Replies](#)

## Teandre's Post: June 15th

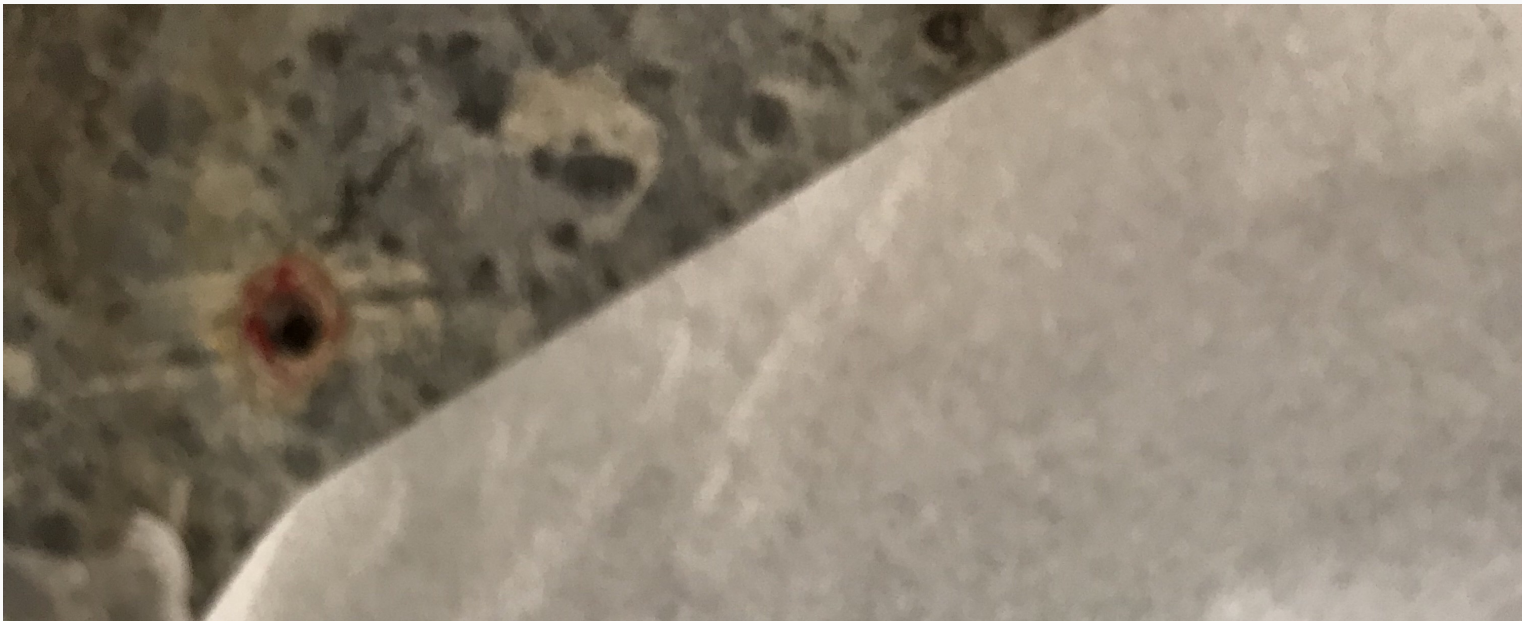
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 [June 15, 2018](#)  [teandr](#)

*Dear diary,*

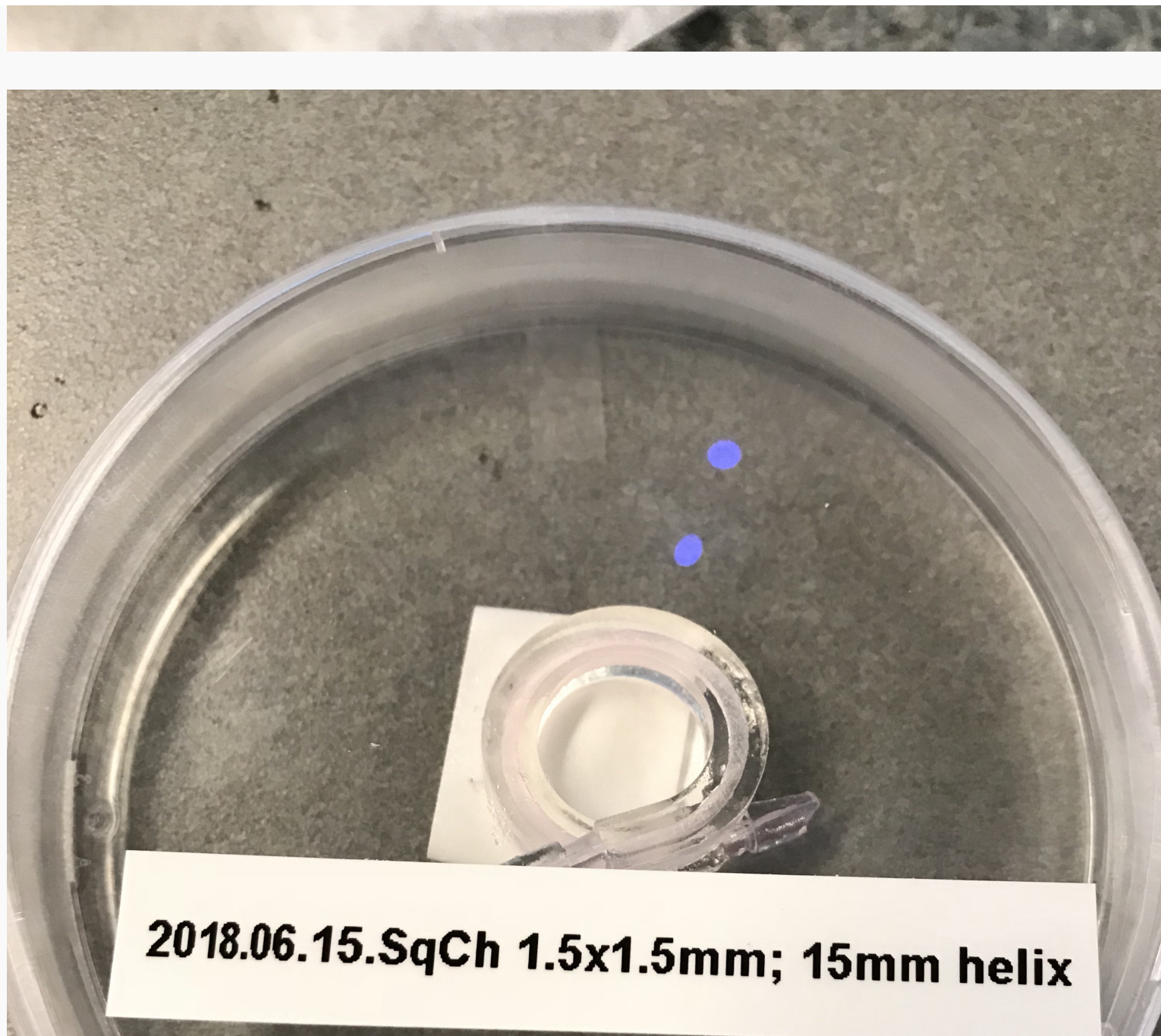
*Today's rating: 11 / 10*

Today was probably my favorite work day so far of this REU. My biosensor team got confirmation that our part we made worked perfectly on the first try.









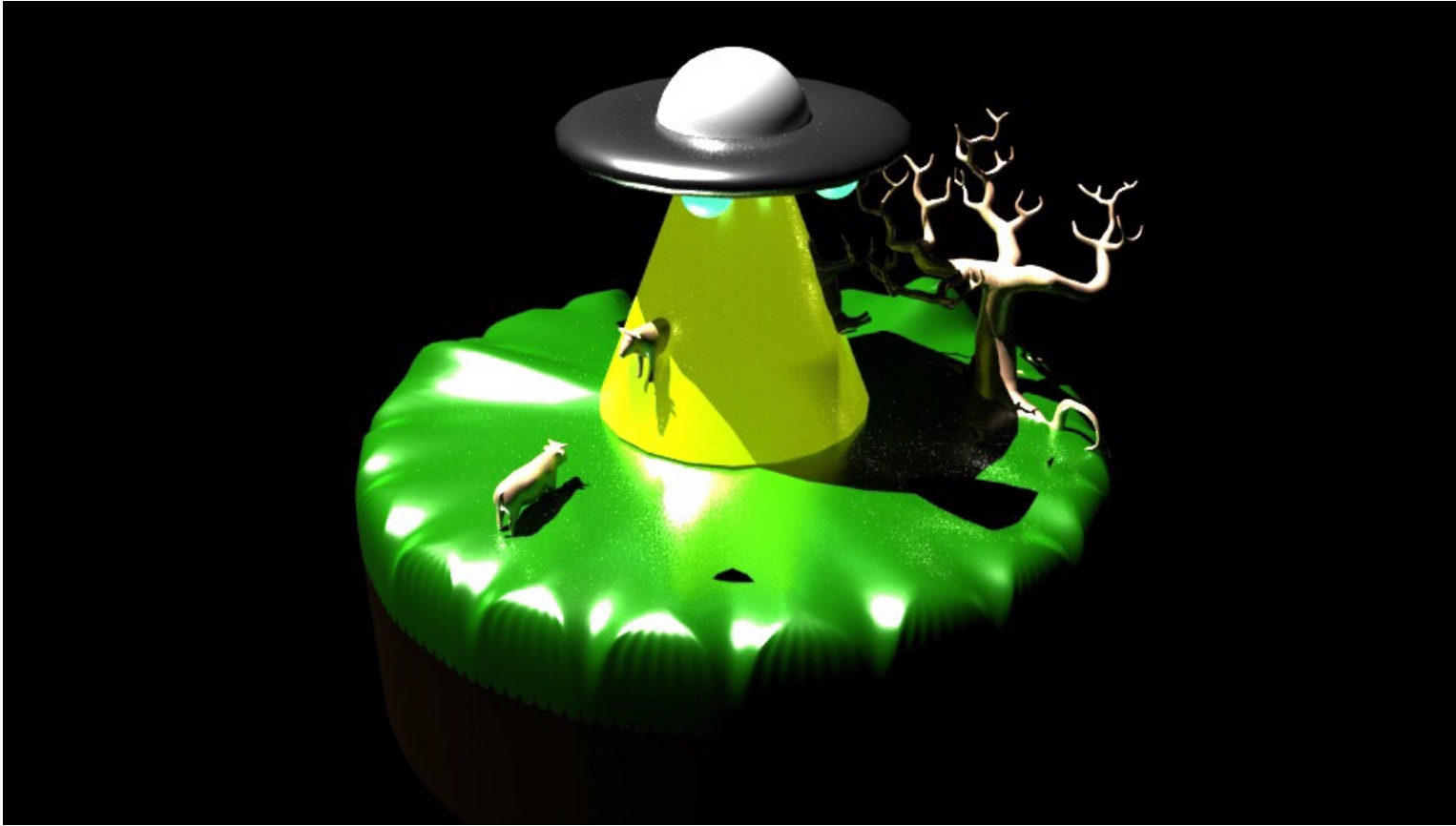


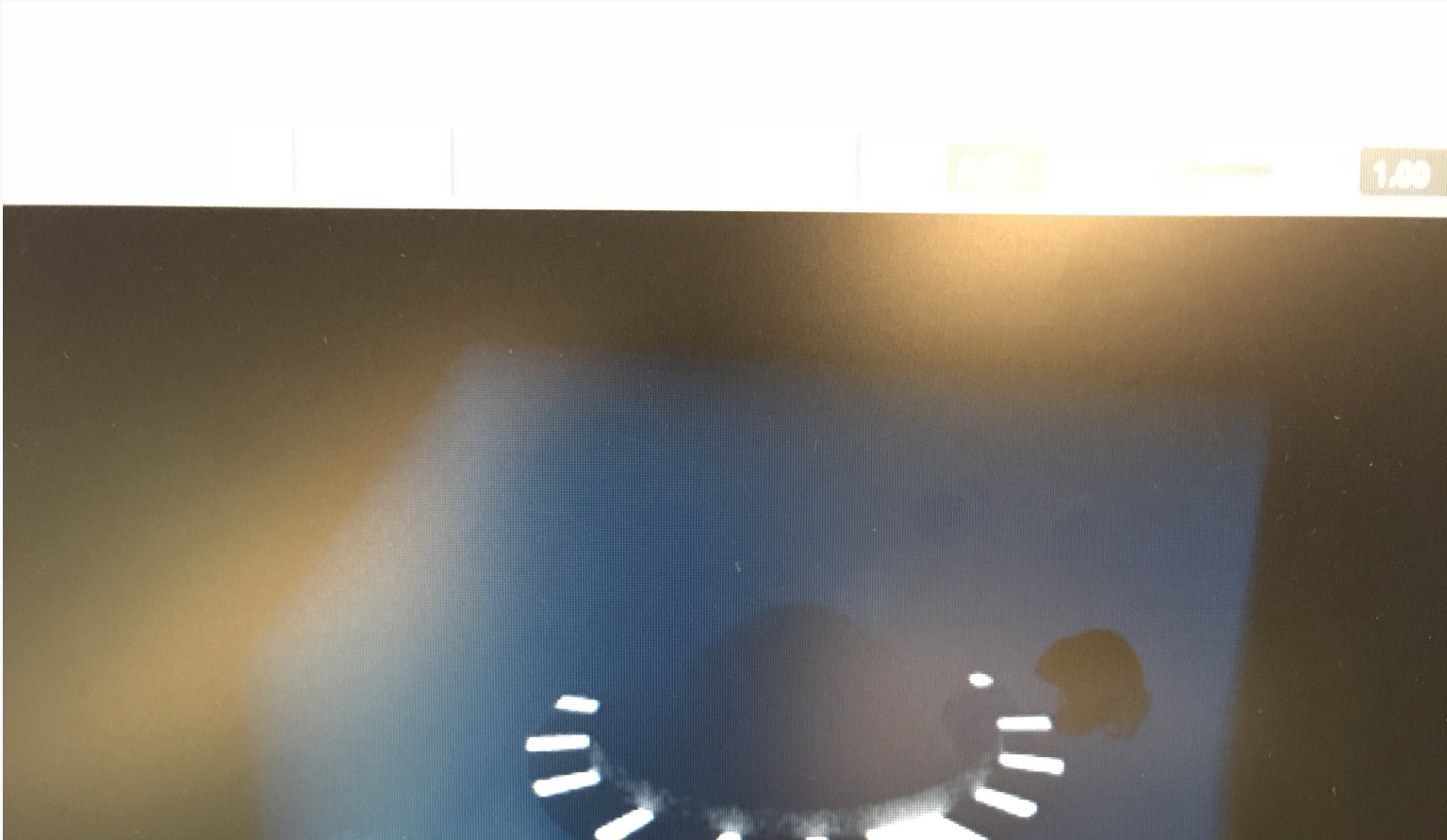
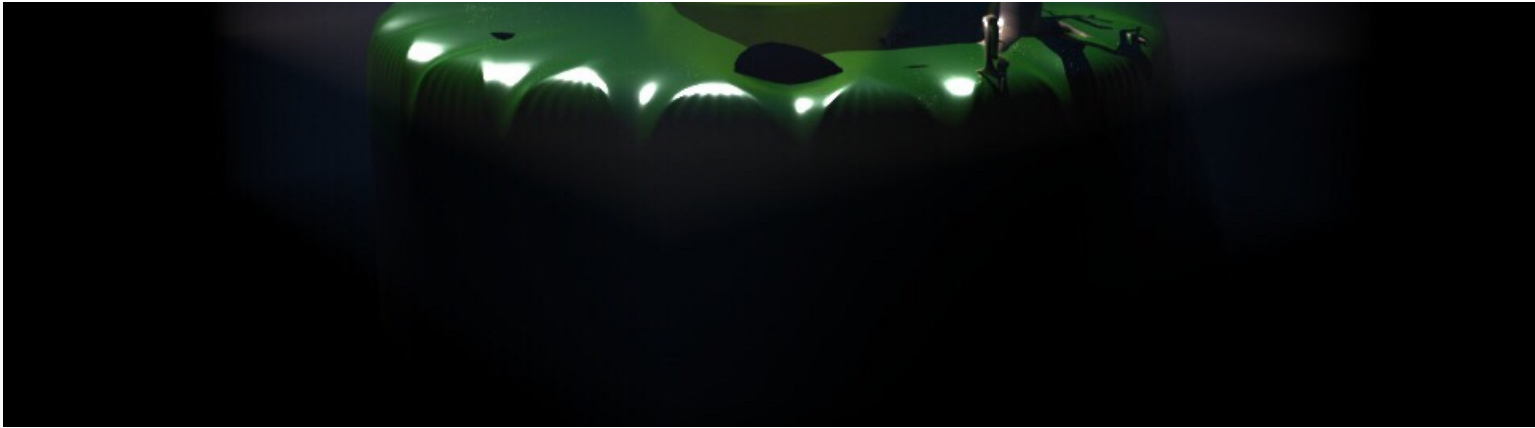


After that we all ate out with our two grad students at Jeff's Pizza. It was a really good time like the slices were so huge and we got to watch part of the World Cup it was Spain vs Portugal. So I enjoyed that a lot we also are going to make two more parts on Monday when we have access to solidworks again.

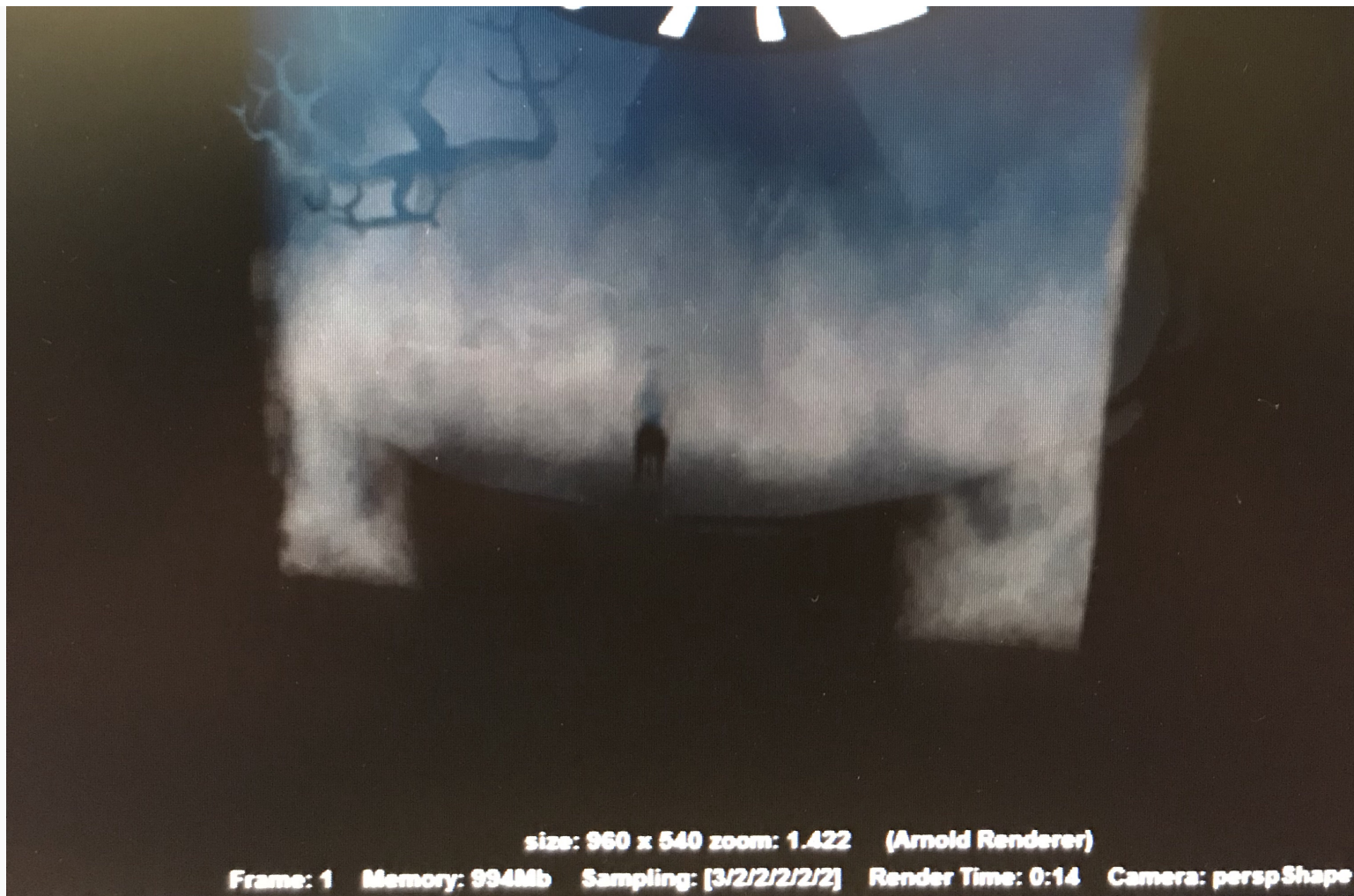
We finished our Maya course and I learned SO MUCH to help me understand how this program works. I'll hopefully be able to transfer what I know into using Blender for games, but here is the scene I made using Maya.











The final pic was a prototype UFO until I learned how materials work. But nevertheless I think I did a good job.

I also went to hang out with 3 of the other interns and we saw The Incredibles 2. A fantastic movie I would rate it a perfect 10 and it's soundtrack was so suave and good. I recommend Frozone's theme as a short listen you won't regret it.

And that's all I have for my blog today see you soon!

 [REU|2018](#)  [Leave a reply](#)

## Teandre's Post: June 14th

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

Good afternoon you dashing beautiful people.

Today's rating I would say is 9.3/10.

We made a lot more progress recently in our project after I presented the idea for a viscous biosensor. Aiden and I developed a part using solidworks so that it can be 3D printed for testing. The part is a helix and it's meant to be inside a tiny box structure so that fluids can go through it and by velocity and centripetal force we'll be able to measure the changes of the environment with bacteria.

Our group also finished our problem area paragraph and we made rough drafts before eventually having our grad mentor review over it.

Our luncheon lecture was also very informative as we were discussing about Big Data and one of the Ph.D students who taught us C++ was showing us her research. Luckily as CS major and Math minor I took both Stats and Database so I was able to mostly follow along with ease of her charts and graphs. She's a very cool person to get to know since she shared us her stories about ice fishing in Minnesota. I also tried Jeff's Pizza for the first time and I can say I never knew pizza and baked potato would taste good together but it did.

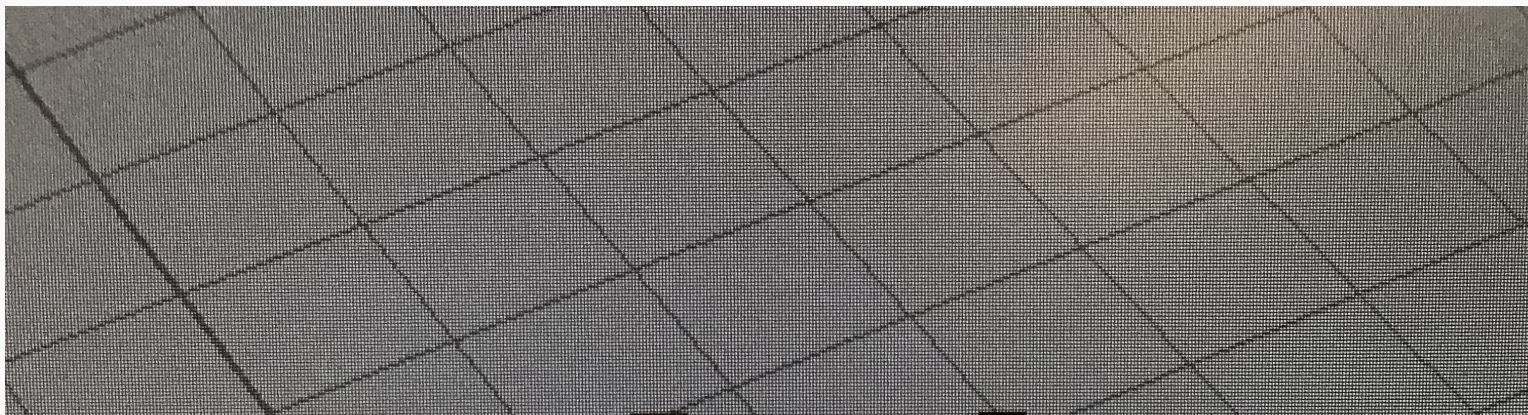
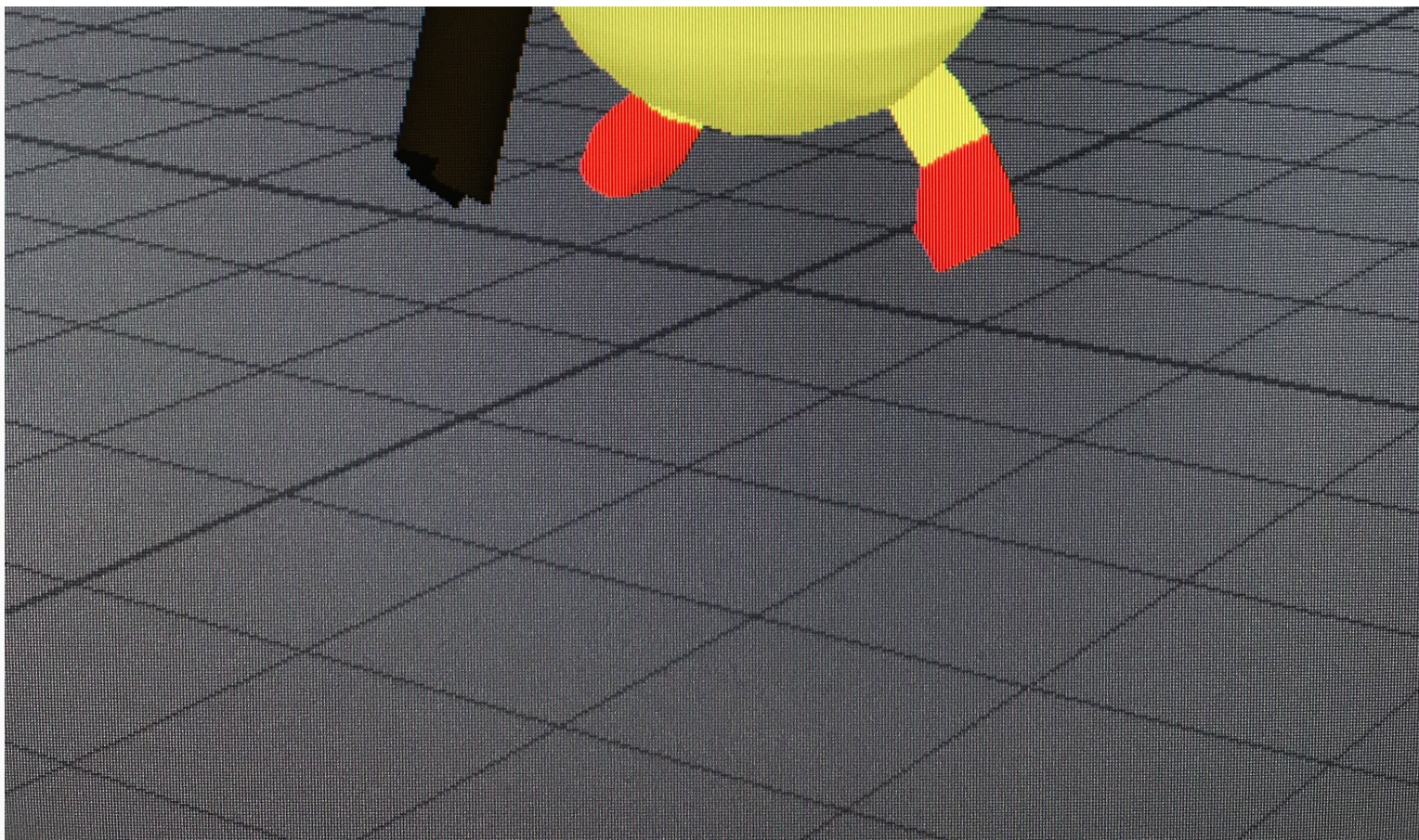


I was too burnt out from reading more research papers so I practiced more on using Maya and made this thing.

I named him a Fancy Boi.



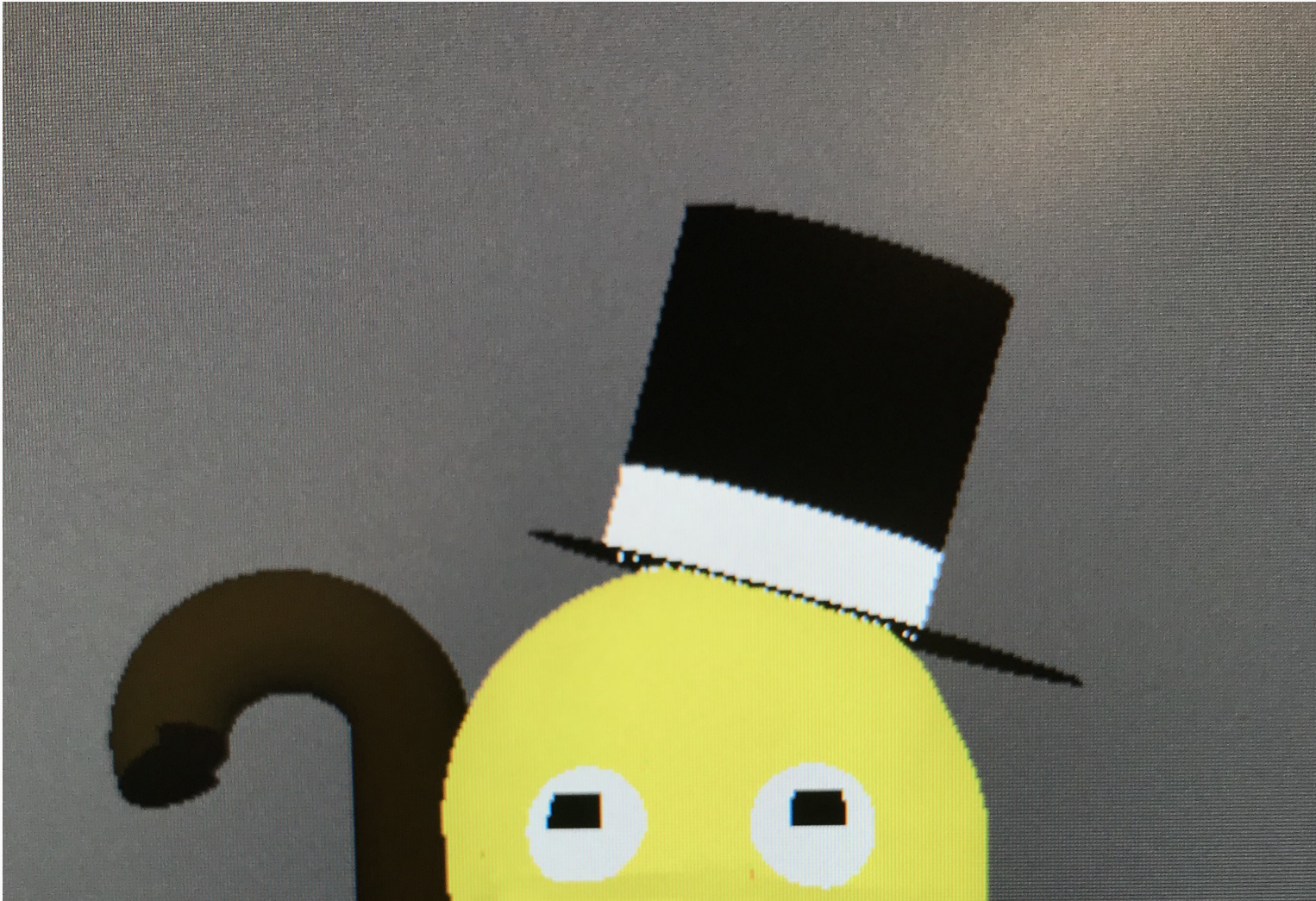




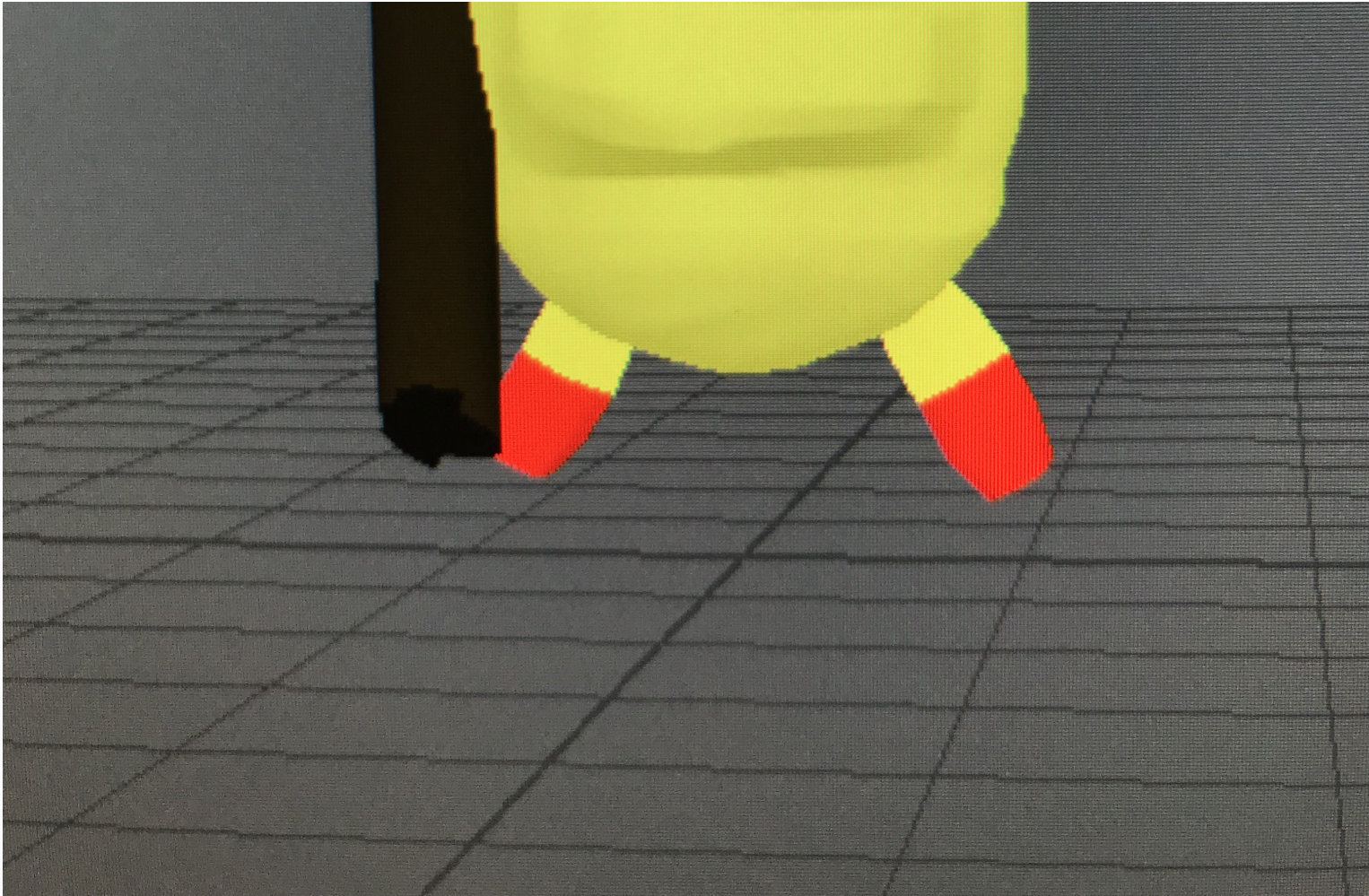












Later on tonight I'm going to try and learn more about GameMaker 2, Unity, and Maya so I'll be ready for next week's courses.

That's all I have for today see you all soon!

 [REU|2018](#)  [1 Reply](#)



# Teandre's Post: June 13th

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 June 13, 2018  teandrer

*Dear diary,*

*Today's rating: 10 / 10*

The world is beautifully made out of atoms and so is this next blog. I travelled all across the edges of Iowa to find inspiration for my next post. I present to you this post.

Today I FINALLY made significant progress on our research. In the next meeting I'll be suggesting the concept of a viscous based biosensor. I'm hoping that if we make a biosensor that detects the changes of density in a viscous solution by endotoxins released by salmonella. I also am going to suggest to use a meat batter since it's a viscous liquid that the biosensor can use.

The past few days were also very exciting since E3 a major video game conference was going on.

We also started learning Solidworks and Maya. They're confusing at first but the more I use it the more I get used it and it becomes easier.

The past weekend we also did a ropes course and biking repair both of which were a lots of fun. I'm glad I went on it because it was valuable team building. Before I came to Iowa this was really hoping that I'll be able to befriend the other interns and I wouldn't be like an outcast or distant, and that hasn't happened yet. All the interns have been awesome and makes me even more grateful I got accepted to this REU.

Here are some photos from the past weekend.





























































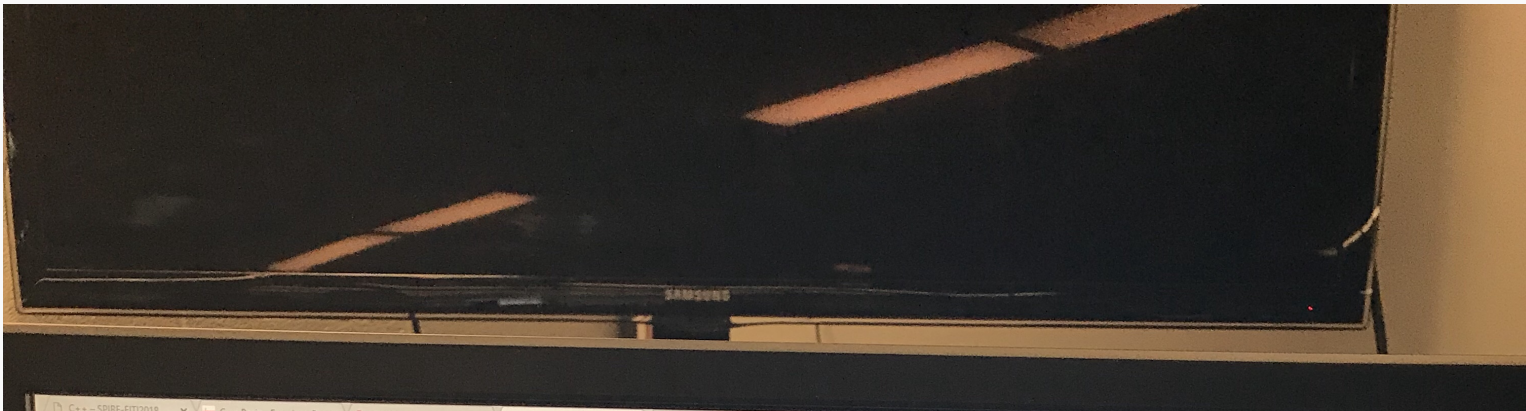
That concludes my post.

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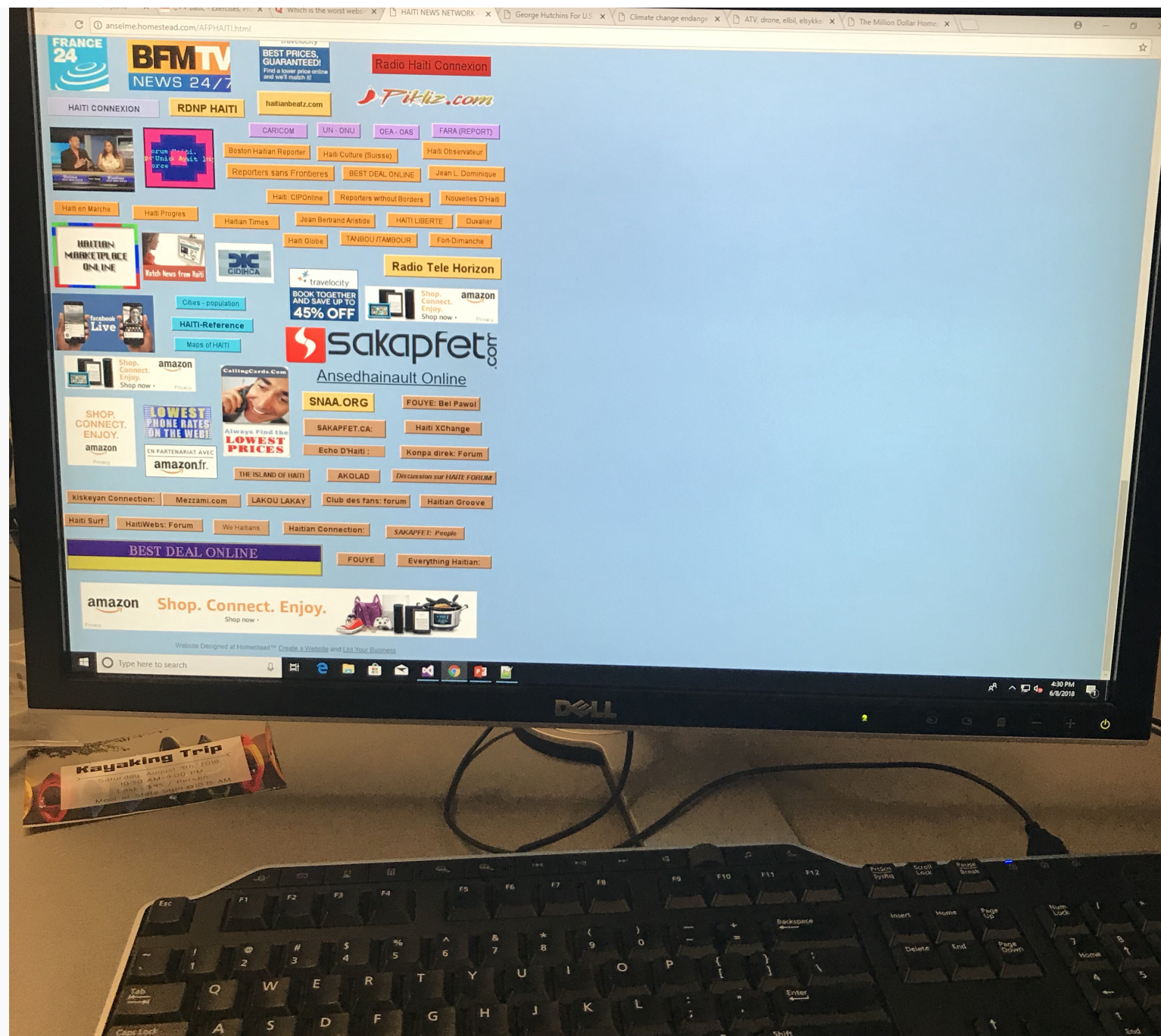
## Examples of bad UI

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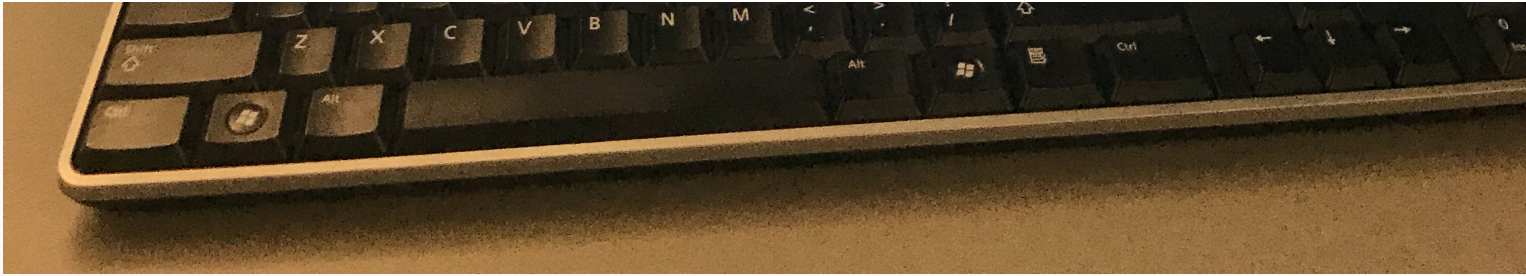
 [June 8, 2018](#)  [teandr](#)



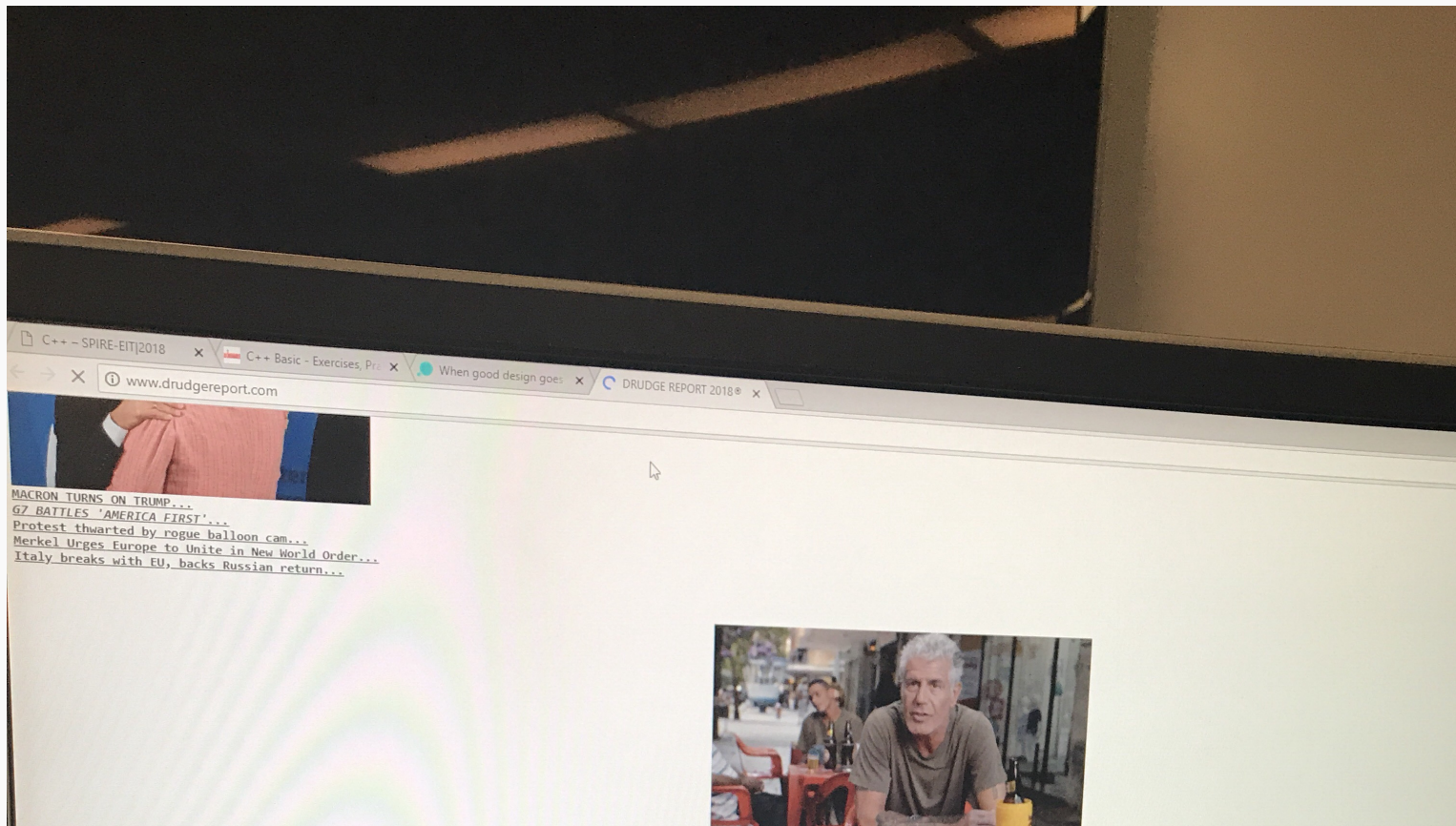




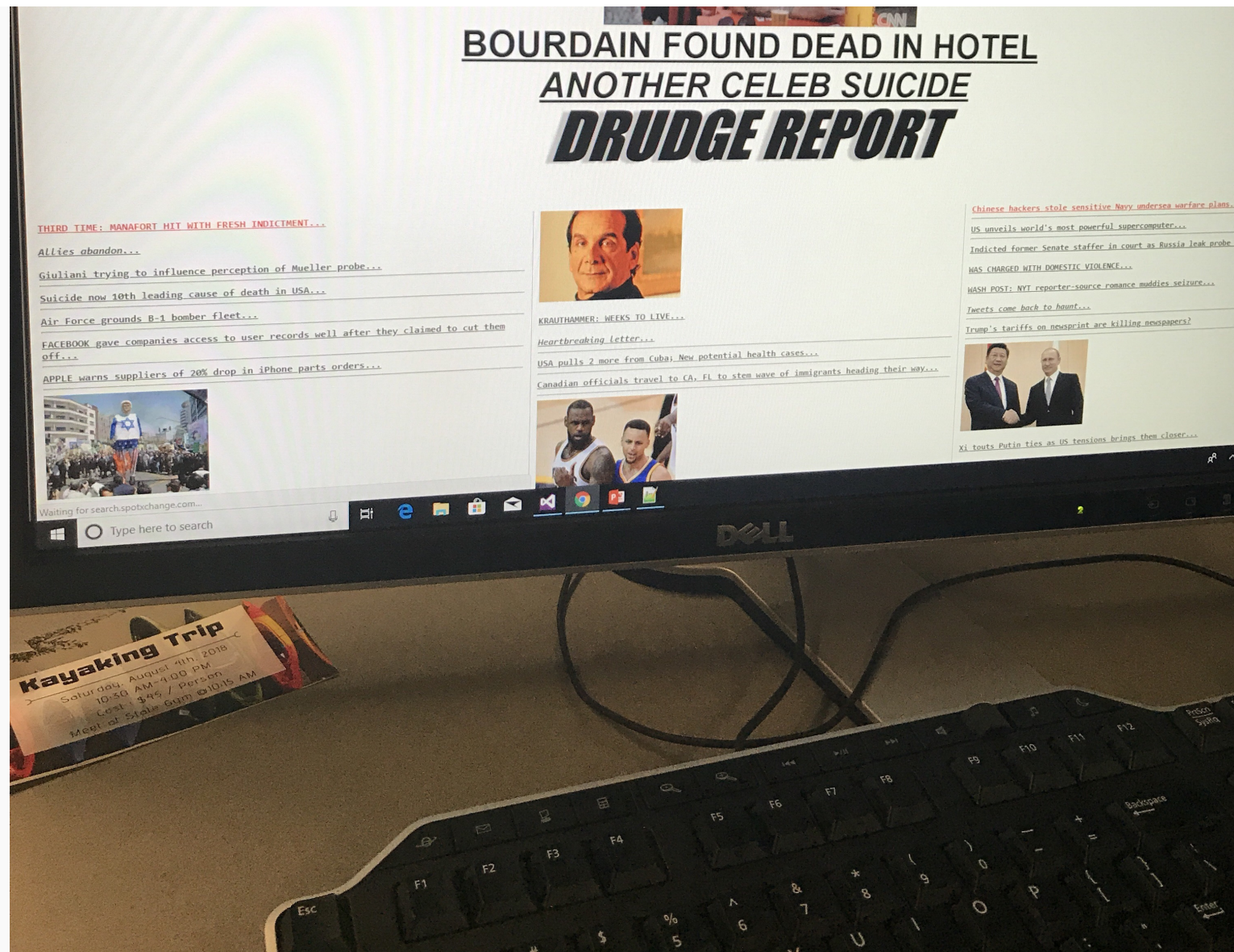




This is absolutely horrendous and tragic. Only half of the page is used and all the links look like they'll take you to a bad gateway that will give your computer a virus. Dusty... It's only saving grace is the baby blue background that has a pleasant view to the eye. I rate this 3.0/10 pure ugly... and pure bad UI...







Now THIS is ugly 🙄🙄🙄 it does right with putting the breaking news in a very noticeable spot but that's because every other placement of news is trash. It's so badly designed that it makes the screen lag when you scroll down... disgraceful. I give this site 2.0/10 utter ugliness.



## Teandre's Post: June 8th

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 [June 8, 2018](#)  [teandr](#)

***Cher journal,***

***La note du jour: 8.4/10***

Today we finished our final course of C++. I decided to find a bunch of assignments online to test my new gained skills so I created a Celsius/Fahrenheit converter and a triangle identifier.

I finished the one hour training so now I'm on to the final training and then I'll finally be able to enter the lab to do the biology half of my research on biosensors so that's awesome!

This weekend is gonna be pretty busy because on Saturday we're having a rope course and on Sunday I'll be repairing some bikes and receiving one for the summer. So I'm excited it's going to be a pretty tiresome weekend end but I'll pull through.

 [REU|2018](#)  [Leave a reply](#)

## Teandre's Post: June 7th

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 [June 8, 2018](#)  [teandr](#)

(This post was meant to be up yesterday)

*Dear diary,*

*Today's rating: 8.0/10*

For our biosensor group today was a lot of online training, but good thing is we're almost done with it by like one or two courses.

We also had a luncheon lecture that was meant to help direct us to a more clear path in going to grad school. The speaker also answered a few of my questions of grad school in Europe since I eventually want to live in either London and/or Paris since those are hotspots for the career I want to pursue.

Later on in the day we also had a team building game day that was tons of fun to do!

 [REU|2018](#)  [Leave a reply](#)

## Teandre's Post: June 6th

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 [June 6, 2018](#)  [teandr](#)

*Dear diary,*

*Today's rating: 8.9/10*

IT'S PAYDAY THE WORLD HAS BLESSED ME!!!!

Also, we begun our day continuing our C++ course where we went over functions, arrays, loops, File I/O, and constructors. I feel like my C++ has gotten better and it's a good basis for us to move over to the next course with Maya and Unity.

However, my teammates and I are wondering if this C++ and our research project will be enough for us to get to a highly competitive grad school. I'm optimistic the future courses will and I hope I can find a way to fully use my CS/Math major to max this REU.



I've also been doing the lab training and it's a whole lot of biology and chemistry which I wasn't expecting to cover in this particular research assignment, but our grad mentors had assured us that there's a heavy programming emphasis in it.

 [REU|2018](#)  [Leave a reply](#)

## Teandre's Post: June 5th

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 [June 5, 2018](#)  [teandr](#)

*Dear diary,*

*Today's rating: 9.0/10*

Our group has begun our official start into our research of biosensors. One research paper I read was regarding about a method to use a biosensor to sense the present of oral cancer. It was a very recent paper as the publish year was in 2018 by graduates of Iowa State.

We then got invited to watch a lecture where a professor was sharing his knowledge on the topic of Fuel and Food consumption and its effects on the environment. The lecture was very enlightening and eye opening as it went over the many topics that effect the topic. Many of humanity's current issues seem to stem from humans consumption of food more than its use of fuel. He broke down that the issues we are facing in the US are more of a first world issue rather than a worldview. What I gained from this is that politics between nations must be in good standing if we are to develop solutions and plans to help fix the problems are planet is sharing.

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## Teandre's Post: June 4th

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 June 4, 2018  teandr

*Dear diary,*

*Today's Rating: 7.5/10*

Today we began our first course of the REU being a C++ course. It was very simple in what we learnt we covered #include, outputs, and made a simple Hello World! Program. We're using Visual Studio 2015 and hopefully we intended on doing object oriented next class. We'll build our knowledge so that we're able to do C# in Unity so this is more of a refresher.

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## Teandre's Post: June 1st

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 June 1, 2018  teandr

*Dear diary,*

*Today's rating: 8.5/10*

Today me and the interns first took a Myer Personality Test so that we were able to get a rough idea of our personality types and how we would function in groups. Afterwards we got a tour of the VR facility where we got to slay invaders of our castle, create fire and space, and go fishing in the magical world of VR. We then got a tour of the C6, a giant virtual reality cube, inside it we got to see a aircraft carrier and airplanes that were meant for Boeing.

*Fun Iowa Fact: Iowa is the only state that starts with two vowels.*

*Below is a photo I took yesterday.*







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## Testing Post

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 [June 1, 2018](#)  [teandr](#)

Fun fact: Jupiter is shrinking at the rate of about 2 cm each year because the planet radiates more heat than it receives from the Sun.

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