

Stanley Adom

projects.vrac.iastate.edu/REU2016/people/interns/stanley-adom/

I can't believe there's a week left

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

9 solid weeks has gone by and we are preparing to say our good bye to everyone. It's going to be sad. Hopefully we plan a reunion at some point.

We have DATA

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

We have ran 6 experiments and have something to put on our results page. The data is looking good and we plan to analyze in on Saturday. It really nice to see what we accomplished come together. Our poster would have something for the results section.

Ball is Life

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

Yesterday, I played four pickup games at the state gym. It felt really really good. We started out playing around the world where I made all the mid range but only made half of my threes. Then a guy came in and made every shot. We continued on by playing 21; a game where it is every man for himself. Being that I couldn't make all my three-pointers(threes) during around the world people left me open at the three point line and I absolutely took advantage. 70% of my points were threes and I ended up winning the game of 21. More people came and we played a game of 4 vs 4. I did everything well but hit threes. This mainly during to the fact I was a ball handler and it's hard to shoot of the off a dribble. We ended up losing 16-14. Then two of our guys left and we picked up 3 people; Quan, a point guard yes and some other big guy to play a proper game of 5 v 5. During that game, we were down 10-2 on a game of 15 then, we simply decided to turn it up and bully the other team in the paint. We came back and won 15-12. Since the game is winner keeps playing, we played another team. One of their guys ask who do you think is better and I said the team that just won. He hit a three and said I got that shot of eBay for \$9.99 and I said I have amazon prime. It was simply going to be long day for him because I haven't played ball in a year and I have trash talk built up. As the game went on we got to a point where nobody was really making shots but we were winning was 9-8. The big guy on our team simply took over and hit 3 three-pointers(threes) to clinch the game 15-10(Three-pointers are worth 2 in pick up games and 2 points are worth 1). I was surprised because he didn't hit any the previous game and managed to find his shot. As I sat in the corner waiting for the next team we are going to play to get ready, I was pondering whether I should stop playing and let my ankles rest for a little bit. The was a fear in my head that I'm going to wake up tomorrow and my ankles are going to feel like crap. Being that I was running on adrenaline I was like whatever and decided to keep playing. The game was absolutely amazing, our team turned into the splash family. Everybody jacked up threes and make them. The other team simply didn't know how to guard us. They ended up making a mediocre comeback by reducing the lead to 13-9 but it was already to late by then. We got a turnover from them, I drove to the basket, the defense collapsed I looked on the three pointer and the first guy I saw was the big dude but he was being properly guarded. The point guard was open, I passed the ball him, he shoot it, it hit the back board and it went into the hoop. And we won 15-9. Then someone said he got lucky. I ask them for the time, he responded 7:18pm and I responded the bank closes at 8pm (bank means backboard in basketball). We all laughed. At this point, I was tired out of my mind, my upper body was simply drenched in sweat. My shorts were pretty soaked up too. Being that I haven't played ball in a year my cardio was really low. I should have went to went



with Steve and call an end to basketball but I just wanted to play so bad. The next team we encountered had a good spot up shorter. He was once of those guys that made every three regardless of the range but could not dribble and shot simultaneously to save his life. Back in the day I feasted on guarding people like these because all you have to do is get up on them and they will lose the ball but due to my ankle limitations where I put 60% of my weight on my right foot, and simply things like lateral step was done slower. He ended up hitting 4 quick threes on me, I asked Quan to guard him. Our team tried making a comeback but it was too late. I walked away feeling really accomplished because I played 4 pick up games. It felt really really good. I understand my ankles were going to feel like trash the next day but I excitement outweighed everything else. Prior to the injury I was a very one way type baller. I drove to the paint and tried to score. I basically never shot threes and didn't know how to dribble with my left hand. However, basketball is really changing especially with the advent of Stephen Curry. Where people are dribbling down the court and taking a three pointer. Which in turn creates space for people to get into position and big men to pick up rebounds. During my time not playing ball, I shoot the ball a lot and developed a natural left hand. I learned how to dribble to balls at once. The game started to come more natural to me, it just sucks it cost me a broken ankle to improve my game.

Third's time is the charm, or second

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

Last night we planned for a 2 hour experiment but once Brian got there, it was evident that we were going to take forever. Brian was an excellent first participant but we took a really long time because it was our first experiment. I can get into much details but we modified our survey's to cut time and improved our monitor quality.

This morning we had an ethics course with Elliott about how screwed up the world is. To survive we basically have to make decisions without bias and look at the grand view of thing. I think it was good for a couple of the guy because I wish someone explained that kind of stuff my freshmen/sophomore year of college, it will make me more aware. Now as a senior I have experienced it first hand, so what Elliott was saying was more refreshing for my memory.

After ethics, Briana did our second experiment with Erik. She said it went really well. I went to Dr Adarsh to get more of an insight of how GPU's work. He showed me a couple of research he was working on. They were really interesting, I can see myself doing that.

I got some food afterwards and did an experiment with Wisdom. He was really engaging but slowing got distracted towards the end. Overall he's participation was helpful in testing what we needed. Our experiment got better.

Experiments! and Lifting

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

Yesterday evening , Steve and I went to the gym to do Chest and Shoulders. It was a good workout nothing too extravagant. Then, later in evening Briana and I drove to Walmart to buy snack for our first experiment. We got assorted kinds of chocolate and starbursts since Zoey wasn't a big fan of chocolate.

Today, after I got to the VRAC, I realized I didn't have much to do so I decided to do better research on graduate school. I found a lot of GPU, Clusters, Multi-core CPU, and Programmable Logic (FPGA). There was a guy named Kunle Olukotun that presented a lecture video in Zurich. It was a little difficult to follow but after Adarsh and I meet up I will have a better understanding of it.

Presentation (July 25 2016)

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

On Saturday morning heavy rain was pouring and my computer desk and chair took the full hit. I saw one of buddies that had a truck at a gas station and he agreed to help me move the the computer desk and chair to my friends house. I know a lot of help is needed when moving. The computer desk wasn't that beat up, it will survive one more year.

On Sunday, I drove back to Ames. The drive is so boring because all I had to do was set the speed on cruise control and steer the car. It made me wonder about self driving cars. One thing that will be needed to added to the cruise control would be steering capabilities. And people can sleep will the car does all the work...jk Once I got back, I picked up Briana and we went to the VRAC to work on the presentation. June decided to walk. We went through our slides, it was rough the first time, then we decided to make modification to our individual sections in the slide and send a final copy to our mentor Guliz by 11pm. June drove back with us to Freddy, she could barely fit because all the stuff in the backseat.

Today, we practiced the presentation in the morning with our mentor, our first try was 8 minutes so we decided to cut down stuff and go faster. We ended up finishing in 6 min and 30 secs. Once we got the hang of it and nicely transitioned between each other talking, we were able to understand the pace we had to keep to maintain the time constraint. Right before the presentation, we practiced one more time and went to JB Conference room. There was a little pressure presenting first however the presentation went really well. Team tutor went up and did their thing and teams from USC presented their project. Most of their project seemed like they were building stuff. Which was nice.

Leg night! No GRE course 😊 Move in a 97 degree weather (July 22 2016)

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

On Thursday evening Steve and I did legs. For some reason there was less people at the gym so we were able to do squats right after warm up. Using we did it after the first two workouts but it's so tedious that it's better to do it when we are still fresh. Steve PR'ed and he seemed really excited. The combination of doing the squats early and taking a break from lifting for a week helped our muscles recover.

My current roommate told me he set up our move out appointment for 2pm. Initially, we agreed for 5pm but for some reason he did two instead. So I had to drive to Mankato Thursday night, so I can have the next morning to do the move. It was sad because I was looking forward to the GRE course Stephen's mom was going to present. I guess I will make it up in the GRE course I will be taking after the REU program. I emailed Angelica about the situation and also talked to Dr Adarsh about cancelling the appointment we had on Friday.

The first thing I moved was my dresser. I basically put all the drawers in the backseat of my car, fitting the dresser shell in the trunk I dropped it off in my new apartment. Then I put the backseat seat I fit the bed frame through the trunk and put the mattress and box spring on top of my car. My current roommate sat on the passenger side and holding the mattress and I help the mattress on the driver side while driving with one hand. The new apartment was 1 minutes away so the drive was fast. I had to throw a lot of stuff in my room into a big trash and leave it in the backseat of my car because the guy in my new apartment lease ends in Aug so my Mattress, box spring and dresser to up the living room space. Upon moving everything out of the my old house I realized that I don't have anywhere to put my computer desk and chair. My car was already filled with trash bag of things in my room so when one of my other friend agreed to let me drop off my computer desk and chair in his garage, there wasn't room in my car to move it.

Found roommates! Dr Rick Stone and Flight Gear solution (July 21 2016)

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

Good news, I found a roommate to live with next year. Initially, I found a couple of guys living by a house on campus but it was a five bedroom and I didn't know any of the four other guys so I was a bit skeptical. So I kept applying to

multiple places. There was an apartment by campus called U Square. They responded to me and showed me my options for roommates. One of the guy was a really good friend of mine since freshmen. I was really excited to see he needed a roommate because he had a level of maturity about him. I signed the lease and talked to Karen about going back to Mankato after the GRE course tomorrow to move my stuff into the new apartment. She said I should tel Karen and other people that have a program on Friday. A couple of my other buddies offered me to live with them but there were all far away from campus. Minnesota weather is horrible during the fall and if I living off-campus I can see myself not making to class, which is something I absolutely don't want to be part off.

Dr Rick Stone was really animated guy, he reminded me of Brian. Dr Rick talked about the how virtual reality is big in the welding industry (WOW, off all places). He continued to explain how is research focused on using virtual reality to prepare people in welding school. He seems really energetic and passionate about working one on one with his research participant. He always went "No offense we are all seating in desk right now, they are people out there doing real work". I could imagine having sparks flying at people welding wouldn't be fun. It's nice to see what he was doing was directly impacting people's lifes.

To finish off the day, I spent 2 hours figuring out how the to incorporate METACODE in FlightGear at a fixed location. Then, it hit me why not turn it on once the research participants are ready(can't get into more details because REU member are some of our research participants). And it worked! Then another problem arose, I discovered some of the airports on google maps weren't available on FlightGear, so I had to change my Flight part so that participants can have alternate airport options. This was really irritating because having a storm coming vertical down at a pilot appears different on the flight than when it's horizontally towards pilot. The camera angle shift with the pilot so this doesn't make to me. I just reduced the speed of the storms so they can appear at the same time.

Presenting at UDC and flight gear(July 20 2016)

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

Today, Angelica gave a presentation about presenting using WebX. It was supposed to be one hour but we got done in 15 minutes. We got the basic run down presenting with WebX and which room we will presenting with.

Later in the afternoon, I worked on the flight gear simulator. There is a METACODE which gave a really vivid severe weather simulation. Once it's turned on, shakes the plane in a random motion and progressively decreases it's altitude. This is really nice because our participants for the experiment will be get really scared and we will respond like they are actually going to crash. The only problem with METACODE is that it's too powerful, I will like to have it a fixed location within the participants flight path. But once it's turned on, it simply starts decrease elevation and creates a random motion for the plane. I basically spent 2 hours trying to figure out how to fix this. I ran the demo codes and got the same response. Tomorrow I try to look for a solution

Long weekend of ankle check up, figuring out housing for next year, and Lucheon with Dr Daniel Spikes(July 19 2019)

Posted on [July 19, 2016](#) by [sadam](#) July 25, 2016

Friday started off with me driving to Vandais Heights Minnesota in the morning for a doctor's appointment. The Doctor performed a live Xray on my ankles and determined that there wasn't any bones stuck in between my ankles. The problem was just that there wasn't any cartilage growing on my ball socket joint. So the fluidity of my ankle motion will be limited. She said I should give it more time, and come back for a follow up in 3 months. Uhh I just want it to be over. The next day, I went to my buddy's house to move my stuff in there however he sadly informed me he wouldn't be going to school next semester because of family issues and he was planning on leaving the lease. As irritated I was, I felt sorry for him. Basically I had a week to figure out next semester, it was not fun. I have had my fair share of roommates in college and wasn't big into living with random people. I looked on craigslist,

called Rent MSU and tried all the apartment complex by campus.

On Monday we went to the Scientific center of Iowa, we went to a corporate office called financial group, then followed it up by going to the scientific museum. At the corporate office, we went to a conference room and discussed about user experience and the impact it has went creating a website. Their goal to transition from phone customer service to an online service. They were searching for an online presence. The corporate office was refreshing because we saw how User Experience job looked like. Once the visit was over, we went to the Scientific center. We saw about three kinds of snakes and petted them. Then we saw a turtle named Lily that was 85 years old. It was really cool.

Today we had a Lucheon with Dr Daniel Spikes. His research was on racial issues within the education system. He was very direct in explaining the racial situation in America. Daniel graduated from college and worked as an assistant principal at a high school, he explained how teachers to sent kids the consider bad, and have him deliver punishment on them. He said over 50% of the students that came to the over were simply misunderstood and not necessarily bad. He felt guilty on handing out harsh judgement and went to graduate school to study racial issues within the school system.

Flying objects in Flightgear simulator

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

I have been building the scenario for the our experiment, so far I was able to get three storms rolling in a synchronous order which appears abruptly in the 5th minutes of our scenarios. I tried putting flying objects to test whether our research participants are not focusing too much on the cognitive assistant and remain situationally aware. However, when I ran couple of demos that had flying objects there wasn't anything on the screen, so I created a seagull flying with a flight path I created but it didn't work. SO I used a flight path that was already in the library but that didn't work either. So right now I stuck at ready forums on ways to solve this.

Prototype, Poster, Scenarios

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

It getting to the final stage of the research and we are focusing on building scenarios, creating a poster, and an interface for the prototype. The poster about integrating on our methods, abstract, problem area, and literature review into it. While for the prototype, we have to decide on which idle to build it in. We have a paper prototype so it will be more about implementation than anything. Finally, the scenario is finding a way to include multiple objects into the flight path to keep participants aware of their situation and make the storm big enough to constrict the amount of decisions they can make.

Excited about GPU's

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

Last Friday, the gang went to SkyZone, where we played 3D Dodge-ball letting of steam on each other. The first time I tried bouncing on the trampoline my ankles felt weird but once everyone were talking about dodge-ball, the excitement overcame the fear. I was moderately able to jump, and struck the ball so I got Angelica and a couple of other people out 😊 Afterwards, we went to Zombie burger, where I ordered a triple Walking Ched burger, which used deep fried macaroni as a bun and triple stacked burger with bacon. It couldn't fit my mouth after a couple of bites, I was so full that I accepted defeat from the burger. It was an abuse to my body but I guess as long I eat that kind of meal once in a while, it's not terrible for you.

Today, there was a guy defending his Masters Thesis, David and I decided to go watch, we were able to keep up in

the first 20 minutes of his presentation, then it got so in-depth it was hard to wrap our heads around everything. I had a surface understanding of it and his topic seemed really cool. After he was done with presentation and question, the committee kicked grad students and us out so they can grill him nicely. Around 11 we started walking to the etiquette banquet, where Stewart gave us proper directions on how to eat at business meeting vs social meetings. It was refreshing and he was quite a character.

Once we came back to the VRAC, I took sometime to read some of the articles Dr Krishnamurthy sent, they were really interesting and I saw myself doing something like that in graduate school. It closed the gap between the application of GPU's and the power of what it can do. Right now, I have a general understanding of how it works however after I chug down a couple similar articles, I will have an in-depth understanding and pick a concrete path for graduate school.

Project Prototype

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

Yesterday our team made a prototype for the Cognitive Assistance project. We had a peers take a look at them and leave comments. Even though Briana explained what our goal was in the email she sent to everyone and I also explained what we were doing verbally, some of the comment we not helpful. People wanted a list of ranked options but our team want to test how to test people's decision making process using a cognitive assistance as a help not a director. Well Dorneich came back his vacation today and had a meeting with us at 10am and gave us insightful feedback. At 11am, we presented our research paper to the journal club and it was a very interactive discussion on how cognitive assistance works. Brian made a reference of it to the Iron man and Jarvis relationship. It would have been nicer if we presented the journal before before commented on our prototype so people would have more insight of what we are doing.

Vreck'd

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

Around 4 oclock yesterday we presented our deeper dive topics, My team, Vreck'd showed everyone the first person shooter game we created over the weekend. We talked about how we used an environment called The Palace of Orithinas, and a couple of bad guys named Max. We controlled Max using Rain a package on Unity's game engine. Using a behavior tree we were able to assign him a patrol route so he could search for the first person shooter and punch them till death. The we talked about limitations of the game, like colliders used to balance Max from falling over when walking up the hill and the speed of the first person shooter. After we got done presenting, Erik tried the game out, killed a couple of bad guys and David did the same thing it was fun. Sadly, our team didn't win the competition for best project June and David had a tie for it.

Stanley I'm going home

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

That was the how everyone in my team felt yesterday when we were working on the deeper dive project. We were here till 8pm. We basically developed a first shooter game called VreckK, where users had to shoot a bunch of enemies in the scene, it was really exciting. I was really surprised the amount of content for unity I found online. A lot of people had tutorials on how to do certain things. After creating enemies and environments on there, I will definitely have a different attitude when playing games. I will be able to see how certain software are developed and the tricks behind it. For example, Wisdom and I were playing FIFA 16 of his laptop yesterday, for some reason his frame rate was slow, so we will see the ball move at a slow speed and goalie jumps were exaggerate like Robert Green in 2006 world cup. The ball looked like a sphere with velocity applied to it and gravity pushing down on it. Games will be a different experience for me from now on.

Tech time

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

Currently operating on two projects, first our REU project flight simulator, which is xml based programming. Second, the deeper dive topic where our team is going to create a game on the oculus rift. That's really going to be exciting, we are going to use a game controller to navigate through the oculus environment. Then have the user shoot at evil minions that are attacking it. McLovin is going to be one of the main bad guys haha

For the flight simulator it's easy to program on it, however it sucks running the scenes to see what you created. My laptop graphics card is not compatible and when I run it on vrac computers it's usability is not fun. I was hoping to get more insight of the software after completing an experiment conducted by mentor for another project but she canceled because we had to meet for an important IRB application adjustment. Since I don't have lifting or much going on tonight, I will ask her for permission to stay at the black engineer building so I can get the software executing

Flight Gear Simulator

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

Yesterday I downloaded the Flight gear simulator for my REU project. In preparation to submit the IRB application, we created a scenario and used an ipad as a cognitive assistance. The participants in our experiment will be tested on decision making during an abnormal event. They will be flying and suddenly get hit by a storm, then our cognitive system will present them data so they can safely fly away from the abnormal event. Right now I getting used to the developing environment of the flightgear, it seems a lot like html.

Building in VR

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

Yesterday we built a first person shooter game on Unity for Iphone VR. It was like the Roll a ball game, where every time the sphere hit a rotation cube it vanishes. The Iphone VR used a head mounted display, so interacting with the environment inside it stationary. Only head movements was used to track where which position was being shot at. The challenge came when I added a Text box that recorded the amount of cubes hit. The gun generated multiple bullets at every event so it difficult to track which spheres were hit. I had to create a new script and import variables from the sphere scripts to control the count of spheres being hit.

Take my Money

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

At the Des Moines trip, we visited Karen at the Art Festival. A couple of her posters looked nice, however my pockets didn't agree. The biggest surprise was that the rain didn't ruin any of the artworks there. At the beginning of the art festival, serious rain was pouring, once we got done parking the car, it was basically a race of who can get littlest amount of rain possible on them before they can get to the festival. At the festival, a couple of people split and Karo got lost. After an hour the rain settled down, we got food! There was a wide selection from funnel cake to Greek food. Compared to the two event that happened in Ames, the quality of food at the art festival was top notch. I started by getting the sampler at the Greek area; it was a combination of lamb, rice and salad. Saying it was delicious was an understatement, the company came all the way from Florida. It was almost like they read the blog post about how bad the food at the farmer's market was. Wisdom and I shared a funnel cake afterwards, then I went to Karen's booth and say her beautiful artwork.

Deeper Dive

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

To we had a deeper dive topic and I will be building an application in Unity. My goal is to create an app in the C6, that will be really cool! right now we focusing on building an app on the the Oculus rift. Vijay had a scene on Unity and we tested it using the Rift, it was pretty awesome.

After making the roll a ball game the main difference I realized the main difference building unity on a desktop and a rift is the placement of the camera

Computational HCI

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

Yesterday was the famous leg day, Steve and I went home first to grab his clothes because the dinner that was scheduled in the evening was cancel. We decided to go to leads gym but his phone directed us back to state gym. After stretching our plan was to get squats over with because it was our hardest workout but there was a guy using the smith machine that didn't leave. We followed the regular sequence of workouts, and hit some good weights. Once we got to our final workout-leg press, my ankles seem to develop a survival strategy diverting inward and putting all the weight on my right leg. Usually it gave out half between workouts but it was the first time my ankle made it to through 90% of the workout with minimal pain. I think it getting to the point where my biggest fall back is jumping. 2 days ago, the doctor called me saying there was something in between my ankle, either an abnormally grown cartilage or a piece of bone. She said she needed a live xray to take a look. I honestly want to get this leg injury healed by the end of the summer. Hopefully after we schedule an xray examination it's just a cartilage so that a steroid can be injected to remove it. I don't want to have another surgery to remove a piece a bone.

Our speaker today was Dr Adarsh Krishnamurth, once he pulled up the title of his slides, it was apparent he used computational geometry to build models on computers. He explained that CPU speed is plateauing and GPU were being used to optimize computer speed. He went on talking about how he used and generated algorithm to build models of things like hearts, engines etc. His talk sparked the most interest for me because I like understanding the behind the scenes structure of an program and applying it in a new fashion. The computational geometric algorithm shows what happens behind the scene and computer science lets you apply it to real life situations.

First Game on unity

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

We had a lot of free time yesterday, so I decided to make a unity game application. I followed a tutorial named Roll a Ball on the unity website. The videos were intuitive and easy to understand and by the time I got done I had a basic understand of how games were built. A mixture of 3D model being controlled by scripts was a prominent theme. It reminded me of working as a programming intern where I used .NET framework to create an interactive dialog box that was being controlled by a C# script. The main difference was how much I'm excited for the virtual reality and development using unity.

IRB Application

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

After brainstorming the the group last night, we were able to develop a hypothesis and an experiment design. It range of thing from surveys, assessments, trails etc. Once we got to the method analysis of our prognosis, we got stuck because we could not develop a strategy to implement our design. Today, we talked to Dorneich and he said we should interview pilots and figure out how they think in off nominal scenarios. The biggest problem is during an off nominal event, a cognitive assistant can present the a solution that is 90% correct to a pilot but when the assistant is 10% wrong the pilots can face jail time for putting people's life at risk.

Swiing

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

On Saturday, I was elevated 30 feet of the floor at the Marshalltown Community College ropes course. The guys released me and I swung back and forth like a little kid at a playground. Going into Marshalltown, I thought the ropes course was going to be more about climbing than anything but it was more of team building. We had a challenge in teams of two where the other partner was blindfolded and had to get directed by his teammate to pass an obstacle course. My partner was Eric, he was blind folded and I directed him to safely without hitting any obstacle. However, when it was his turn, he gave terrible instructions and had me hitting everything. A lot of the guys was finished the day by climbing the tower, while I watch because of my ankles.

On Sunday, I made Chicken teriyaki and Thai Jasmine rice for everyone. June and Brian came late and didn't have any ☺ It was still a good time, we watch the NBA final, witnessed Lebron get his 3rd NBA championship. It was a really good game, I would have loved for Kyrie to be the Finals MVP because he was playing out of his minded and showed up when his team needed to be clutch. However, Lebron was playing on some other level, he led every player in points, rebound, assist, block and every other main stat.

Today, we started our unity course which was like Maya mixed with a game environment. A lot of the controls overlapped so it was easy to follow. Unity had the camera functionality semi-automated so it easier to focus on new functionality.

Conquer the hunger

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

Yesterday's REU agenda ended with doing a tutorial on Solidworks. We built a camera following step-by-step instructions. Compared to Maya, Solidworks was more "engineer like". It has more limitations because it keeps track of the mass, density, and other physical functions. Most models in Solidworks can be created in real life, which is not the case for Maya. Maya was more mesh/free-form and used for animations.

After the workday ended, Steve and I went for our famous leg workout. While the workout was more intense that it was last week, we seemed to feel less sore after it. We agreed it was a combination of the fact last week was the first time we did it (well I personally did it 2 years ago) and the fact that we did squats right after the our warm up. Before my ankle injury, I did a lot of intense works, and yesterday was the first time I lifted a good amount of weights, and my ankles took it moderately well. It felt really good; hopefully I can start jumping comfortably so I can get back to my basketball days.

The workout left me really hungry this morning. I had a good meal before I went to bed but got hungry at 3am. Eating late is a bad habit, so I decided to go back to bed and have a meal in the morning. The down side was that I woke up late too make any food; scrambling with the 10 minutes before the bus leaves, I put on my clothes, ankle bracelet, found my wallet, keys and phone, then placed my laptop in my backpack and caught the 8:47 bus. You're probably thinking I'm a dirty pig; however I initially woke up at 8am, brushed my teeth and when I tried putting my clothes on, I ended up passing out on my bed. If you're still wondering about my hygiene, I took a shower the night before. Well, as the day continued, I found myself in Howe Hall hungrier than Hungarians (is that a thing?). Looking

forward to Luncheon with the Dr. Veronica, I killed time by finishing up the Maya project; by the way, if you are reading this it's too late...jk (it's a Drake album that stormed the internet). Back to the Maya problem, if you know how to store brighter Maya images please let me know because my project looks good in the render frame, but once I save it as JPEG or PNG, it comes off dark. As the morning continued, I killed more time with my team, mentor and professor at our Brainstorming session. Then, I managed to persevere through Dr Veronica's 1 hour and 15 minutes presentation. To be fair, it seemed really interesting, but I was too hungry to focus. The key things I remembered from the slides were the cake and picnic from pictures she put up. Once it was time to eat I grabbed two Jimmy John's, a cookie, and chips. It filled me up pretty nicely.

Trump 3D Paint

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

Yesterday we went on an extracurricular activity where we drew 3D painting. While some people were focused on drawing flowers, Erik was photobombing the picture by writing TRUMP....yup

After the activity, I went home and took a 12 hour nap/sleep. It was really refreshing because on the previous nights I was running on 3 hours off sleep. The only downside is I woke really tired this morning and didn't feel like doing anything.

21st birthday

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

It was an eventful weekend. It started off Friday when we celebrated June's birthday who had turned 19. We had a couple of people over and celebrated the youthfulness. On Saturday, we went to the farmer's market in the morning, got some free samples. I was in the mood for a bigger meal, so I decided to buy nacho BBQ from a vending truck. It was absolutely horrible, but I was so hungry I chucked through half of it anyways. To wash down the taste, I bought caramel apple from a lady at the market. My thinking was "how can someone ruin caramel apple?" Well it was like the lady could read my mind and decided to take up the challenge. The caramel coating was pasty and the apple inside was soggy. I felt so depressed because I spent \$12 on food and was disgusted. A couple of the guys came together and decided to go to a restaurant. We looked on Google and The Spice Thai Cuisine had 4.2 stars. It looked promising! We went in, got some appetizers and I ordered Duck roast. I was expecting a smoked Duck, but the waitress brought a bowl containing a broth of the some vegetables and duck. I immediately thought "omg! Not again!" I used the spoon to scoop a little bit of the broth, had a little taste with my eyes closed, and it actually turned out pretty nice. Finally, some good food. I continued on to pour some on my Jasmine rice, mixed it up and enjoyed the delicious meal.

Later during the day I drove back to Mankato to celebrate my 21 with a couple of my friends. On the 3 hour drive someone cut me off on the fast lane going at a terribly slow speed. Knowing my brake capabilities, I honked at them encourage them to speed up but since they weren't smart enough to look over their shoulders before they turned, so I wasn't really expecting much. To avoid the collision, I maneuvered to the slow lane but that wasn't enough because there still car there. I ended up taking a right towards the shoulder of the highway, where my tires took a beating on the rumble strips. I safely decelerated and head back on the main highway.

On the remaining 1 hour 30 minutes drive, I pondered how I could been fatally hurt on my 21st. Once I reached home, I got together with my buddies, had a couple of people over and went to the bars for my first legal drink. I have always been the youngest in my grade, so it was refreshing seeing all my freshman year buddies at the bars. They were surprised that I turned 21 this late being that "I looked like I was 30 with 2 wives and 10 kids" as one of them said. I enjoyed the night and had one of my friends sober cabbed me home. The next day, I woke up and did literature review on an article. Then, I drove back to Ames.

Cognitive Assistance articles and Problem Area Draft

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This week our team has been focusing on getting the draft for the problem area done. It started out all of us researching articles related with cognitive assistance and space missions. We ventured in our different paths and found articles then we had a meeting with Guliz, our grad student and Dr Dorneich to structure what we have learn structure ideas we found in different articles and synthesized them together.

For me, it was a first time looking up journals and I didn't have the proper access to get the right journal. It will be fair to say I struggled On Saturday I was able to surf the IEEE database but once I came back during the week, I was cut off and asked to pay for subscription. I talked to Briana and she showed me how she accessed journals on Georgia tech school website. Then, I talked to the IT guys and helped get access to IEEE Xplore which had a lot of space mission related articles. However, getting the articles wasn't even enough, I had to learn how to scheme through multiple of them and get important information. Last night I think I spent 3 hours reading only two articles 😊 I felt like I was finding the right articles but I wasn't going through them quickly enough. I more self aware of my reading speed and I don't mind the challenge because it preps me better for the GRE verbal section. However, I'm most excited for the coding part of this project, so I can actually have some fun.

Today, we had a Luncheon with Dr James Oliver, who had an interesting insight on graduate school and how the system work. It was refreshing to see the dynamics between professor, grants, and grad school applicant.

First week

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

Driving to Iowa, I expected a small university in a town in the middle of nowhere. However, upon my arrival I was struck with a University of Minnesota like campus, with a lot of activities and students in it. We started Tuesday night by having a dinner with a couple of faculty member, grad student and other REU students. Everyone introduced themselves and Elliot and Stephen gave us a little preview on what we were going to be doing here. He ended with an open ended question "Why are we paying you?" and we all went home thinking about it.

We followed up the next couple of days by touring campus, playing laser tag, starting our first writing and journal club. However, nothing topped getting a tour of the equipment provided in the VRAC lab. We started by using the HTC Vive, were two tracking sensor sensors were used to keep track of the movements of the user, and the headset was used to trick the brain it was in a different environment. Then, I used a 3D paint application where I created a graphite saying "STAN DA MAN" It felt really cool. The nice thing about the vive is that is reduced motion sickness because both walking and usually of hand was encapsulated in the environment. Unlike, common VR product in the market, Oculus rift and Samsung gear. Our tour guide proceeded to take us to the C6 room. he said the projectors alone costs about 32 million dollars, and the graphic cluster processor was the largest in the world. My group got the impression we were in for something big. We went into the room put on the headset and saw ourselves in hanger housing military aircrafts. I immediately got my snapchat out to record the experience. C6 was the first time I was in a 3D environment that felt immersed. Usually when using other VR, I feel to certain degree of disbelief but in the C6 I don't know what to expect. I literally had a jet fly at me and people on my snap story. We finished the equipment tour by looking at 3D printers. Our tour guide showed us the latest equipment in market, sequentially showing previous models until he reached an early model. It had an arduino microcontroller and a stepper motor....WOW... I always thought 3D printers were super complex. He went on to explain how different algorithm are been implemented to find the most efficient way to print.

This week was a success and I was fortunate to learn a lot

Blogsomeness

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Hello guys, I'm pretty excited for the 2016 REU