Shamaria Engram



projects.vrac.jastate.edu/REU2014/

Hold up wait a minute! Ya'll thought I was finished!

Posted on July 31, 2014 by Shamaria

So this week has flown by surprisingly. I thought that it might go slow since it was the last week. Anyway I had a nice conversation with Stephen yesterday about grad school and some schools that I may want to check into for the field that I want to go in. That conversation was helpful and has helped me narrow down my list of schools to apply for, but it is a definite that I am going to grad school one way or another.

I have exactly 50 more hours until I touch down in Florida, where there is nice scorching hot weather, chick fil a, popeyes, publix, premium channels, my dog, my family, the city, nomal sized ants, normal sized mosquitos, I can go on and on but I won't ③ . lowa is definitely different, and I've had a great time here but it is time to return to the luxuries of Florida.



Posted on July 29, 2014 by Shamaria

We finally got Chipotle!! It was amazing and now I have the Itis.

THE END!

Last Week

Posted on July 28, 2014 by Shamaria

Things are finally winding down, it's our last week here. This weekend was pretty cool, hanging with Alexis, Getch, Mari, and Janae on Saturday night. Sunday, I just studied for the GRE, went to the gym, and then I took a walk to Dunkin Donuts for happy hour and got a large Iced Coffee for \$0.99.

Other than that not much happening, ready to get home and enjoy normal weather, a comfy bed, premium channels, good food, and see my dog.

Friday!!!!!!

Posted on July 25, 2014 by Shamaria

It's finally Friday, and there's one week left until I can get some real food, and relax. Today we showed our interface to Col. Martin and Dr. Bloebaum, and they liked it! YAYYY!! The interface definitely has some future work to be done like maybe making it into an app or displaying it on a tablet, there's a lot of possibilities for it. But Col. Martin said that it's definitely a great start and he was impressed.

I hope everyone has a great weekend!!

Is it Friday yet?

Posted on July 24, 2014 by Shamaria

This morning I woke up thinking that it was Friday. Then I came to the realization that it was Thursday. I'm so glad that I'm done with the interface, I was literally having dreams about socket programming and how I was going to get the interface to work. Talk about stressed, I think I was mostly stressed because time was winding down and I couldn't get anything to work and then all of a sudden things started coming together, and now everything works fine. I've commented my code *cough cough* Getch, and I've cleaned it up a little bit to make things work better. Now we just have to finish the paper, and poster.

Hump Day!!

Posted on July 23, 2014 by Shamaria

So I think I may have finished the interface, it works fine with XPlane on my computer so now hopefully when I test it on the Flight Sim computers it will work. Now I just need to comment my code. Sketch(Getch) would be so proud to see comments.

Progress

Posted on July 22, 2014 by Shamaria

So I'm making a little bit of progress reading in the UDP packets. I've figured out how to convert the bytes to a single float and how to get out several different measurements at the same time. Now I just have a few more things to do and hopefully I'll be done with the interface by Thursday and hopefully everything works like it's supposed to. *fingers crossed*

Countdown

Posted on July 21, 2014 by Shamaria

I am officially on countdown to the days that I go home. I think I've had enough of lowa, I'm ready to sleep in my own bed, see my family, and eat a home cooked meal.

Saturday was fun at paintball, once I got past the pain of the paintball hitting me it was actually pretty cool. Buffalo Wild Wings after was amazing I have been wanting wings for the longest.

Sunday was spent working on the interface for the project. I finally got the program to read the udp data but now I just need to figure out the format of it so that it will display the correct information on the interface.

Uggggghhhhh/2

Posted on July 18, 2014 by Shamaria

So today isn't as frustrating as yesterday I can still keep and use some of the work that I have already done in Qt, since Qt has a QUDPSocket Class that I can use to communicate with XPlane using UDP. I was really upset yesterday because I thought I was going to have to start from scratch using C# or write a plug-in.

Anyways it's friday, no need to be down, although I'm probably going to have to spend part of my weekend working on the interface since I have a deadline of Tuesday to have it done. Which sucks because this weekend is really busy with paintball tomorrow, and Holly's lake house on Sunday. Oh well, what doesn't kill you makes you stronger right? At least that's what they say. ②

Uggggghhhhhhhhh

Posted on July 17, 2014 by Shamaria

So I thought we were so close to being done with our interface and then we could work on writing our paper. Unfortunately we can't read from the file as we thought we could because XPlane locks the file and we can't get access to it until after the flight is over, which defeats the purpose. So basically I can't read from the file as it's being written to which would have been nice to know weeks ago. Now we have to figure something else out and try to get it done in two weeks. 3

I can see the light!

Posted on July 15, 2014 by Shamaria

So I finally finished a functional interface for our research project, which is sort of a relief, but now I can't get the .exe to run.

Hopefully, it won't take long to figure out then we just have to go and test it in the flight sim lab, and then we have our poster and final paper to write, and we're done!

Sorry for the short post, but I've got work to do! ■

Monday???

Posted on July 14, 2014 by Shamaria

Why is the weekend so short?? This weekend went by really fast, when my alarm clock went off this morning I was really confused as to why it was going off, and then I remembered that it's Monday and time to get to work.

Reiman Gardens was pretty cool except for when we had to walk into the Butterfly Garden, I didn't like them flying around me, but everything else was pretty cool. Afterwards, we went to Battles to eat, I liked it better than Hickory Park, but it still doesn't compare to barbecue back home. Then Jesse, Janae, Mariama, and I had to catch the bus back and someone (I won't name any names) decided to put us on the wrong bus and we rode around for half an hour on the wrong bus and once we got off we had to run to catch the right bus.

This morning it took me 3 hours to figure out how to make the measurements flash on our interface, which was frustrating, but I'm glad it's done now I just have to make all of them flash and rearrange them to match the "Gestalt Grouping principles" that we are going to follow.

Friday!

Posted on July 11, 2014 by Shamaria

I haven't blogged in like 3 days, due to the slow internet and REU presentations. The presentations went really well, it was interesting to see what other the REU sites are working on. I feel really good about what we are working on here because majority of us started from scratch there was no initial work done for us, where as at some of the other REU sites some of the initial work was done for them, so they had something to work off of already. Their work was still really exciting to hear about though.

It's crazy how time has gone by so fast here, we only have 3 weeks left. I'm sort of ready to get home though, I've missed the home cooked meals and summer vacations. Feels like I've had no break from school, being at this REU just seems like a continuation of school. It will be nice to have 2 weeks to relax when I get home before I actually have to go back to school.

This weekend will be for more GRE studying, I'm pretty confident about my quantitative score from the practice test that I took, I just need to work on my score for the verbal section. It's decent but I would like for it to be just a little higher.



Long Day

Posted on July 8, 2014 by Shamaria

Today has seemed so long already and it's only 1:00, the days normally don't seem long to me.

Anyways, my group and I have almost finished the slides for the presentations on Thursday. Then hopefully I can get the interface done by Friday so I can make sure it works properly with X Plane, if not at least I'll have some time to figure out a plan B. Then we can work on our poster draft and final research paper, and everything will be done. Yayy!!! Doesn't sound like that much but when I actually think about it, it sort of is a lot to do.

I was actually kind of excited that we were going on a "Field Trip" tomorrow, but I guess it's good that it's cancelled because that gives us a whole day to work on our projects tomorrow.

I've also been really motivated to get to the gym lately, normally I have to force myself to get there. Maybe it's because I'm actually seeing results now, I've lost a few pounds and six pack is well on the way, *cough cough* Jesse. Looks like I may win the bet after all.

So much to do, So little time

Posted on July 7, 2014 by Shamaria

The time here has gone by faster than I anticipated. We only have four weeks left here, mid-summer presentations are on Thursday, and poster drafts are due next week. The end is approaching fast and we still have a lot of work to do, and after a long relaxing weekend I really haven't gotten back into work mode yet.

Not much else to say today. Back to preparing for the mid-summer presentations.

Short story

Posted on July 2, 2014 by Shamaria

4th of July weekend begins in 3 hours!!!

The End!

PhD???

Posted on July 1, 2014 by Shamaria

After today's luncheon lecture with Jim Oliver, I think I may want to look more into getting a PhD. At first I was under the impression that PhD's mostly go into academia and there was no point in getting a PhD if you want to go into industry. But now after the luncheon lecture I may want to look more into it, I'm not exactly sure what I want to do with my life, I think I want to go into industry but maybe I can just stay in school and get my PhD, hopefully I'll be sure by then.

Anyway, I finally figured out how to get the Qt project working for our flight sim interface. Thanks to Stacy!!!! THANKS STACY! Now I just have to figure out how to update the lcd number automatically using a timer function. Hopefully it won't be too hard.

According to Alexis today is Thursday and tomorrow is Friday. So definitely looking forward to tomorrow, and then the weekend!!!

Short week

Posted on June 30, 2014 by Shamaria

This week will be so short we only have Monday, Tuesday, and Wednesday, to work this week. I'm kind of excited for an extended weekend although I'll probably spend most of it still working on Qt and taking practice GRE tests.

Mall of America wasn't what I expected it to be, they had duplicate stores everywhere. The malls that I have at home are the exact same except there's no roller coasters in the middle of it, but for the most part I have the same stores at home. I ended up going to watch a movie in the movie theater to kill time, 6 hours was way too long to spend at the mall.

Sunday, was nice and relaxing for the most part. I got to study for the GRE a little, workout, and we had a pot luck dinner, which was nice.

So there's a tornado warning, my first one since being in Iowa, everyone seems worried, maybe I should be too. Bye!

Friday

Posted on June 27, 2014 by Shamaria

It's always a good day when it's Friday, even though it's raining outside, it still doesn't ruin the fact that Friday is finally here and the work week is over and the weekend begins. Time for Mall of America tomorrow, I think I need a little retail therapy.

As far as work goes, I guess everything is going alright. Now we can finally start working on the design of the interface after all of the things that were due this week. It's just a little frustrating trying to learn a language, while designing something complex. The coding doesn't come naturally using Qt, just because I'm not proficient in it yet so I don't know everything that I can do with it, and unfortunately Google is not helping. Apparently no one has ever used QLCDNumber to read data from a text file and display the measurements on the screen, and if they have why would they not put it on the internet?... So inconsiderate of today's programmers!... Just kidding, I just need to keep working at it and learning Qt.

That's it for today. Time for the weekend festivities!

Soccer time

Posted on June 26, 2014 by Shamaria

Today instead of the luncheon lecture we got to watch the soccer game (USA vs Germany). I guess soccer can get pretty intense, it's not as boring as I thought. It's still not something I would just watch on my own, but it was entertaining to watch everyone's expressions who were really into it.

Yesterday, my group and I finished our literature review, and today hopefully we can get our methods paragraph done. I like to get things done in advance, I hate waiting to do things at the last minute. After the methods paragraph we have to start working on how our interface is going to look and then coding it, see if it works with XPlane, and prepare for the mid summer project presentations next week.

Tonight we have game night for the extracurricular activity, it should be fun, I'll try not to look as intimidating when we start playing games as everyone says I do.

Hump day

Posted on June 25, 2014 by Shamaria

So this morning, waking up at 6:45 for flying was not easy. I didn't think it would be too hard since during the school year I normally wake up at 5:20 for weights, beach runs, and morning workouts for softball, but I guess once you get used to sleeping in for awhile waking up early never gets easy. Anyways it was pretty cool to finally go flying after it has been put off for almost two weeks now, it wasn't as bumpy and hot as I thought it would be. The takeoff and landing for such a small little plane was actually very smooth and it wasn't too hot once we got up in the air.

Today's HCI class was very interesting. Of course it's always interesting when there is food involved. I hope she comes back for a luncheon lecture one of these days.

Normally, the days go by pretty quick to me but today just seems so slow and I feel really impatient for some reason. I don't know why, maybe because it's "hump day" so tomorrow and Friday should go by quickly and then we go to Mall of America.

Today at lunch I made this bet with Jesse that I could have a six pack by the end of the 10 weeks that we're here. I really don't know why I made that bet, I guess I just don't like turning down challenges. But now that I've made it I guess I better start working on it because I don't like losing. As everyone knows, "If you're not first you're last!"

Education and Gaming

Posted on June 24, 2014 by Shamaria

So today we had a really interesting discussion on using games and technology in education. It was very interesting to see all of the different viewpoints and opinions on this topic. I personally feel as if it could be used in education but it shouldn't be the sole source of where students are learning from, I think a good mixture of both technology and lectures/books should be used because although technology is becoming more increasingly important, students still should know how to engage in conversation and topic discussion, whereas if a student is learning something such as math from a game, they are only interacting with that game and not other students or their teacher. So as discussed today, technology, depending on the person and their background of course could very well cause some social awkwardness.

Anyways, besides that not much has happened between today and yesterday. My group and I finally get to go flying tomorrow, which has been put off for 2 weeks now. Hopefully the weather is nice and we can get it in, I'm really looking forward to the experience, although I'm not necessarily looking forward to waking up at 6:45. This week we have a lot of things due (research question, lit review, and methods paragraph). Most of it we pretty much have done except for the methods paragraph, it's kind of hard to come up with methods on how we're going to test our interface when we don't even have an interface designed yet and we don't know exactly how we're going to design it and what system failures we are going to test, as we are still researching most common system failures for our aircraft, what might be feasible for an undergraduate in training, and FAA guidelines on what we can and can't have on the interface.

This morning's class on statement of purpose for graduate school really made me think that I really need to get it in gear and start preparing for Grad school. But first thing is taking the GRE which I will probably be taking in August when I get back home.

Start of a new week

Posted on June 23, 2014 by Shamaria

Today has been pretty nice so far with no class this morning. I was able to go through Qt tutorials and do things actually related to our Research project. We don't have much scheduled for this afternoon either, just the OpenGL project presentations, and then we are free to work on our projects more. We still need to iron out a few details with the IRB so that's probably what my group and I are going to do. I like having no class, I can get so much more done now.

This weekend at SkyZone was really fun as well, even though we played dodge ball the whole time it was a nice little workout before Zombie Burger. I was told that I was pretty intense while playing dodge ball, I can get really competitive when it comes to games. Zombie Burger was soooo fattening but sooo good at the same time, I had the RayGun double burger with loaded fries and a root beer float, for a total of probably 3000 calories. I definitely have to work extra hard in the gym this week. No days off!!

Friday!!

Posted on June 20, 2014 by Shamaria

I'm so glad it's Friday. I'm ready for Skyzone and Zombie Burger tomorrow, ready to get away from work for a little while. Although I'll have to come back to reality Saturday night after the activities because we still have to finish the OpenGL project, the IRB application, learning QT, and Xplane. But at least I have my TV, coffee, and trolli gummy worms now that my parent's sent me that should help me get through everything.

This IRB stuff is quite the headache, especially when you find out last minute that you have to do it.

Other than that, keeping it short and sweet today.

Until Monday

Busy Week

Posted on June 19, 2014 by Shamaria

This week has been sort of busy, with the OpenGL course, Journal Club readings, Craft of Research readings, and our Research projects. And with all of the classes feel's like I barely have time to do anything. Anyways I really wish we had more time to learn OpenGL, and what everything means, I don't like being told that I have to just know to include something every time, and I don't know why or what it means. Well obviously I know my code won't work without it, but I would actually like to know why and what it does. Also the IRB Applications are due tomorrow and at first we were told that we weren't testing our interface we were just going to develop it based on past research, so we really didn't think about experimentation and user studies, but then yesterday we were told it would be a good idea to test the interface and do user studies, so now we have to figure out how to do the IRB Application that's due TOMORROW!

For the interface, my group and I have to start doing QT tutorials and learning how Xplane outputs the data so that we can start the coding and implementation for our interface. I'm so glad that we are done with classes next week, (well at least the early morning classes), so that we will have more time to focus on our research projects. Other than that this week has been great!

Day 2 Week 4

Posted on June 17, 2014 by Shamaria

So not much has happened between today and yesterday. But for the OpenGL project we have decided to do a game similar to frogger. OpenGL doesn't seem too hard, I think I would actually like it once I get used to it and the syntax, and also working with the z direction as I'm used to x and y but that shouldn't be too hard to grasp.

Mariama and Janae are also trying to convince me to go to Chicago with them for the fourth of July weekend. Who knows maybe I will, depending on some things.

We are also finally going flying today in a small aircraft, I was told the ride will be a bit bumpy because of the weather, hopefully I don't get motion sick, I've never experienced anything like this before.

Monday....

Posted on June 16, 2014 by Shamaria

The weekend went by way too fast! But it was a good weekend nonetheless. Saturday we went hiking, I'm not much of a nature person but it was cool to experience something different. Sunday, was supposed to be a relaxing day for me, which it started out that way. I got my clothes washed and took an online practice GRE test, which I did pretty well on, for having never studied for it before. Then I decided to take the CyRide to Walmart to get a few things, (I can never go to Walmart without buying extra stuff that I didn't intend on buying), I ended up spending half the day at Walmart, because I couldn't get everything I wanted because I was riding the bus back to campus and well I only have two hands. After a 3 hour Walmart trip, I get back to the apartment and Sam tells me that she is heading to Walmart, so I go back to Walmart with her to get all of the stuff that I had to put back since I had took the bus, finally getting back to the apartment at around 6.

Today we started the computer graphics programming course with OpenGL. Seems like it will be fun to learn, I'm looking forward to the upcoming days.

The UDCC was closed today for lunch (3) due to a fire. What's up with all the fires here at lowa State?

End of the week

Posted on June 13, 2014 by Shamaria

TGIF! I have been looking forward to today, this week has been a very long week. On the plus side my group and I have finished a rough draft of our abstract we just have to make a few changes and will have a final draft by Tuesday. Then we can start working on our interface, which will be a little challenging but I'm looking forward to getting started on it.

Tomorrow morning my group and I are also going flying to get some experience with the cockpit and the gauges, to help us in the design of our interface.

Sunday is definitely going to be a rest day maybe take an online practice GRE test, and maybe do some C++ and databases. But that's about it for Sunday. Besides going to the gym of course!

Don't Call Us! We'll Call you...

Posted on June 11, 2014 by Shamaria

Today we had the etiquette lunch, and it was fun and interesting learning how to properly eat at a business lunch/dinner. It was even more fun catching each other when we weren't doing something right. I also pretended as if I was a CEO of a company and I was asking Janae, Jesse, Mariama, Sam, and Getch questions on why they wanted to work for my company, what would make them an asset, etc. Then at the end of the lunch I said, "Thank you for your time, Don't call us, We'll call you!" It was funny, to pretend like we were conducting interviews.

We also had our third day of modeling today and we have to choose a project to do. My group and I haven't decided what that would be yet but I'm sure it would be something cool that we could 3D print.

Yesterday, we had the rock climbing extracurricular event at state gym, but because I indulged in all the pizza and bread sticks yesterday I decided to burn some extra calories and run around the track yesterday. I have actually decided to do this air force workout that is supposed to help you get your mile time down between 6-8 minutes, I'm only aiming for the 8 minute mile. Hopefully I'll be back in shape by the time I go back to school and before I start practice.

Broke the diet..... Again!

Posted on June 10, 2014 by Shamaria

So I have actually been doing good with the diet lately, well until the luncheon lecture today. They get me every time! Yesterday I convinced myself that if we had something unhealthy at the luncheon lecture that I would not over do it and only eat in moderation. Well.... that was the plan until I saw the pizza. I downed 3 slices and some bread sticks, talk about over doing it. And well now I have the "Itis" as Jesse would call it. But that just means I definitely have to put in extra work in the gym today.

The speaker Rey Junco from the luncheon lecture today was very interesting. He was a very fun guy and fun to listen to.

Today was the second modeling course and while at first I thought it wasn't so bad, it would just take some getting used to... and well today let's just say I have a whole new opinion of modeling and SolidWorks.

Monday.....

Posted on June 9, 2014 by Shamaria

The weekend went by so fast! I feel like I was just in the lab yesterday. Anyways, the weekend was nice at the farmer's market even though it rained, but there was a lot of cool stuff out there. The picnic yesterday was cool too, we ate hickory park, met some of the other interns in the other REU programs, and played games, such as uno and spoons. I must say spoons got pretty intense.

Today we just started our modeling course, it's definitely something new for me, but I'm glad that I'm learning new things.

My group and I are also making some progress on our research projects, we will hopefully have our abstract done by tomorrow. And then we go flying on Saturday to experience flying in the plane that we are going to be creating an interface for and to also get familiar with the engine gauges and flight instruments. It should be fun!!

Road to a healthy lifestyle

Posted on June 6, 2014 by Shamaria

So today Mariama, Janae, and I decided to actually stick to our diet and we all ate pretty healthy today in the UDCC despite the tempting burritos, donuts, and ice cream. Now we just have to hit the gym tonight to burn off some calories, and maybe I'll sit in the sauna too.

Last night for our extra curricular activity, we did light painting. That was nice and we took some pretty cool pictures.

This morning we had our final programming course on File I/O. It's definitely a lot simpler to write to and read from files in C++ than in Java. Afterwards my group and I worked on our project and it feels good to get the basic functionality of it working, now all we have to do is add some cool features such as color and difficulty levels that the user can choose from.

Lastly, we had our journal club this morning, which went really well. Col. Martin shared some interesting things with us about planes, his experiences, and a little bit of his background. We also had an interesting discussion about trusting computer systems in airplanes; why can't the pilot just do everything for himself? We definitely had people on both sides of the argument, but all in all it was a good discussion and I think our journal article related very well to our project.

So much for dieting

Posted on June 5, 2014 by Shamaria

Yesterday, Mariama, Janae, Sam, and I decided that we were going to be eating healthier and exercising everyday. The start of it was actually supposed to be today. So much for that because at the luncheon lecture we had chicken strips, fries, coleslaw, and brownies. (Fried food and sweets). So I was like ok I can eat chicken strips, fries, and coleslaw, and just start my diet tomorrow or next week. But Mariama was like "You might as well get the brownie, if you're gonna cheat go all the way."..... So much for motivating each other to stay on track on our road to a healthy lifestyle.

We also had our fourth programming course today, I must say pointers and memory will definitely take some getting used to. Also my group and I have been working on our project to present next week, which is going to be a game simulating simon, where a sequence of colors will flash across the screen and the user will input that sequence of colors and will continue to play until they incorrectly enter the sequence of colors. Sounds simple enough, but for some reason I cannot figure out how to read in more than one string and separate the string to compare each color that the user input with the color sequence that was given to them. Soooo any help would be greatly appreciated!!

Stormy in Iowa

Posted on June 4, 2014 by Shamaria

So last night we were supposed to be having this big storm and everyone was all worried about hail and tornadoes, but we decided that the storm wasn't so bad and went out to eat at Hickory Park. That place was soooo good and cheap, a meal like what I got would have cost at least \$17 back at home, my meal only cost \$9.95 and I got ribs, chicken, mac & cheese, and baked beans. I didn't try the ice cream because I was really full but it will definitely be on the menu for next time.

This morning we had our 3rd programming course about object orientation and inheritance. I definitely like inheritance in Java better than in C++, because in Java all you have to do is use the keyword extends and then the name of the class that you are inheriting from. In C++ there's a lot more that you have to do and also when creating classes there's two separate files .h and .cpp, while in Java one class = one file. Also I have to get used to remembering what header files to include in my main class, because in Java if I forget to import a library it will give me an error but all I have to do is hit Ctrl + Shift + o and it imports it for me. Other than that the C++ learning is going really well and similar to Java in some ways, so it's not taking me long to catch on.

Day 2 Week 2

Posted on June 3, 2014 by Shamaria

Today has been pretty cool so far. We had the programming course which is actually fun for me, I know Java already so C++ hasn't really been that hard for me to pick up on. We also had the luncheon lecture which was pretty interesting to listen to, even though psychology is not my field of study. For lunch today our grad mentor Elliott took us (Holly, Mitchell, and I) to lunch at an Indian restaurant, which was really nice. I've never had Indian food before but it was actually really good. Which was bad for me because I definitely over ate, but I guess I'll just have to spend more time in the gym today.

Start of a new week

Posted on June 2, 2014 by Shamaria

So last week was very fun and interesting with going through orientation, touring the vrac and seeing all of the cool, new, emerging technology, and also the ropes course. The ropes course was very fun although I was done for after the rope swing. And I have to admit the trust fall was kind of scary as well, and those bugs out there were atrocious; but I managed to live.

I am very excited to begin this week and start the programming course and get more in depth with my project and research team (Flight Sim team).

First Post

Posted on May 29, 2014 by Shamaria

The spaghetti and gumdrop activity was pretty cool yesterday. I'm also excited to see the C6 today!