# SPIRE-EIT|2018

Summer Program for Interdisciplinary Research and Education – Emerging Interface Technologies (SPIRE-EIT)



Home About Calendar▼ Courses▼ Research Teams▼ People▼ Resources▼ Summer Photos

# Stephan Terry



### The Atrocity that is an Ames Haircut

🛗 July 19, 2018 🛛 💄 sterry

Another day, another delay. But most of you probably arn't reading this the day of, so the fact that I'm calling out the delay is the only reason why you would even notice it... maybe I should erase all this and start over... but I'm not gonna cause this is a lot of text and I hate coming up with intros. They're almost as poorly designed as my transitions ...

Now lemme tell ya'll about this bad haircut I got. For any of you working in the same office as me, I'm sure you've noticed that I've been wearing a hat this entire week. And I know word has already spread so lemme just document the atrocity that is a Ames haircut so future generations will take head.



Lemme start with a preface, I didn't absentmindedly just walk into any old barber shop. I did research and risk analysis to avoid this outcome, but it was inevitable. It started with a google search of barbers, looked through some pictures for people of my demographic; came up with nothing. Then I got some recommendations from some Ames residents. I found someone who I thought I could trust clearly I was mistaken, I should have considered the fact that his hair was 1/100th the length of my own.

So now I'm walking into the shop on a Saturday morning, a scheduled appointment. The place looks clean enough, music at a too high volume, sports on the TV, and a very strict on the hour schedule, all good signs. Then the professional does something that alleviates all of my skepticism. He pulled out one of those single blade straight edge razors and starts lining up the current gentlemen's head. Some of you out there might not know this, but only the most confident of barbers would ever do something as bold as dice someone up with one of those



I get called up and I join him with a thoughtless smile, thinking that nothing could go wrong. I give him the usual script that I give all of my first time barbers "Shape me up, fade the sides, clean up the top", simple yet effective. Then he does something that worried me greatly; he started asking follow up questions. And not just one or two, dozens of questions that I was fully unprepared for; fade length, top height, puff geometry. I never would have expected this type of interrogation from such a simple description yet here I was. Making up length sizes and gesturing parametric hair shapes just trying to give this man a glimmer of an idea of what I was looking for. Clearly I had failed. While he was mid-cut and I

saw the large swath of hair rolling down my barber cape, I already knew mistakes were made. At that point I had no choice but to close my eyes and pray silently. When he showed me that mirror at the end of the cut my first thought came to that one guy from Recess.

Q Search for:

### Blogs

- Ahmed Abdirahman
- Ilan Buzzetti
- Victoria Green A.I Hanus
- Aidan Kidder-Wolff
- Gabriel Kulp Leilanie Morales Rivera
- Teandre Roberts
- Inshira Seshie
- Stephan Terry
- Kira Thomas Mary Truong

#### Courses

- C++
- Craft of Research
- Deeper DivesIntro to HCI
- Luncheon Lectures Maya
- Solidworks
- Unity

#### **Recent Posts**

- Sadness Abounds
- August 3rd (Fin) Time Crunch
- Val Nehls' Hot Wheels
- August 2nd (Penultimate)
- WelpShort Post
- Week 10: Finishing Up
- Teandre's Post: Blog Catching
- Up Weekend 9: A Quick Family Visit
- Poster Arrived
- Last Monday
- OUR POSTER!
  July 27th 30th (Praxis)
- The benefit of doing grad school

#### **Recent Comments**

- buzzetti on To go where no one
- has gone before buzzetti on To go where no one
- has gone before
- sterry on The Atrocity that is an Ames Haircut
- buzzetti on The Atrocity that is an Ames Haircut
- buzzetti on The Atrocity that is an Ames Haircut

#### Meta

Log in

#### Funded by NSF



I had to confirm the extent of the awfulness with some of my friends back home. I was unprepared for the roast session that proceeded. I've decided that I must return and get the most basic of cuts, the buzzcut. This coming Saturday I will be returning to get my money worth, please wish me luck.

And now to get my mid off things for a bit.



🖿 REU|2018 🛛 🖳 14 Replies

### **Experimental Runs and the Prime Phenomenon**

🛗 July 17, 2018 🛛 💄 sterry

Not sure how to start after a break this long. I usually mention how long of a break it was and then try to divert attention immediately. Also look how cute this dog is getting his haircut.



Now lemme tell you about my REU project. Our group did a lot of backtracking then progress repeatedly to finally figure out a reasonable way to run our experiment. Just a brief description of what we're doing now; we recorded video from multiple drones in the sheriffs office with hostiles (people with fake guns) randomly in rooms. We're then showing police recorded video and seeing if they can find the hostile.

Some of our experimental variables is sometimes there are threats, sometime there arn't. Also we have trials with one drone scanning the building on its own, and some with three drones scanning the building. In the three drone case we have two interfaces that we randomly assigned to participants. One with a single monitor and one with three separate monitors. Here's a couple examples of what the video looks like.



We got to run half the people yesterday until 3am and we'll be running some more through it later today not until 3am. Were looking for accuracy, mental workload and trust in the robotic. Its fun stuff, evaluating the data might be less fun.

Amazon Prime day just passed. I bought things I didn't know I needed until Amazon showed me that I needed them. If my mothers reading this, expect a few random packages coming to the house in a couple weeks.

I saw this neat bookbag with a laptop compartment and usb charger and got it because mine currently had a hole in it. I saw these drinks and bought it because its like 60 cents a can vs the \$1.25 I would normally spend back at school. I got a 360 piece plastic cutlery set... cause... it was only \$15 I guess, also that's alot of cutlery. Then I got this oil diffuser thing so I can make stuff smell good... I guess. Almost sprung for the DNA Test but was convinced that I spent enough money by the multitude notifications on my banking app. Maybe my buying habits are a problem, but I can't wait for that satisfaction when I open all those crisp cardboard boxes. I didn't even mention the drone I bought.



So yup fun stuff. New month new me, so I'm gonna have new memes. A presequel meme for all of you Star Wars fans out there.





🛅 REU|2018 🛛 🖳 2 Replies

### The Limits of Procrastination

🛗 June 29, 2018 🛛 💄 sterry

Well... We've reached that point.

The tasks and work have piled up to a degree at which it can no longer be ignored. My hair is longer than it's ever been, the fridge is emptire than its ever been, I'm getting dozens of reminder emails from various people, I need to produce in my deeper dive and research project, my projector return date is rapidly approaching, and my guest intermet has run out. I'm not even come mention the bloc ost delays

It's not the first time I've been here, nor will it be the last unfortunately. But all I can do now is show up. As I am typing this I am printing out my return label and preparing to call IT support. My gmail is up and fuller than ever and my literature review paragraph is being worked on by a



group member. I need to ask Jamiahus where a barber is and I need to find a time to get to the market. I've all but given up on creating a 3D model as I intended and will likely have to produce something and chop all my wasted time up as a learning experience.

Sorry about the short post. Looks like I got work to do.



#### This might be a long weekend.

And of course they pick now for double experience points on Fortnite. sigh

Not even this comic can perk my spirits now.



#### 💷 REU|2018 🛛 🖳 Leave a reply

### **Delayed Posts and Self Motivation**

🛗 June 26, 2018 🛛 💄 sterry

Welcome back, before we go any further just want to answer some of your questions right from the start

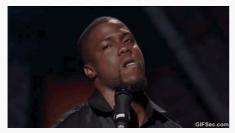
- 1. Yes I know what daily means.
- 2. No I haven't gotten anymore organized since we last spoke
- 3. Yes I have given up on eating healthy
- 4. And of course, no my ethernet still isn't up

Now that we've past all of that, lets get into whats been happening the last 3... maybe 4 days since we last spoke. I'm looking at my phone images and I don't see many new photos other than internet memes, so it would seem that I haven't done much socializing this weekend. The last images I have are from when me and my peers went out to get pizza and Tee last picture took my phone and snuck some pictures as you can see. Pretty good time, I got way too large of a pizza and it's still sitting in my fridge, where it will stay for a couple more weeks till I throw it away hope my roommates don't read these.





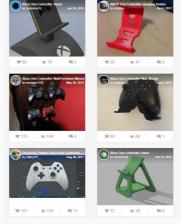
Other than that, now that I have too much free money too burn, I've been looking into new ways of depleting my reserves. For the time that seems to be concert tickets as it turns out a lot of performers are coming to Penn State next semester and I gotta be in on all the pop-culture. Kevin Hart, J Cole, Justin Timberlake, and Elton John that tast one might not count as pop-culture are all coming and I'm trying to decide on who I should get tickets to see. That along with Fortnite. My bank account looking at me like §



going to work, but it sounds interesting so I'll go with it for the time.

Research project talk, not sure where to start with this one Seems like we're taking a bit of a pivot from what my initial understanding of the project was and how we were going to run our experiment. That's not the largest issue though, I would say the largest problems are technical as well as literature based, which you know is just 90% of what we're doing. I haven't really wanted to mess with the technical problems as much as the rest of my group, but I'm starting to feel some annoyance coming from my other group members because of that, so I might have to start learning new things wish me luck. I suppose I haven't really been getting enough work done on the literature review paper to warrant that being one of my only tasks so it probably for the best  $\ensuremath{\scriptscriptstyle \mathrm{I}}$ need to start working on that thing harder too. It really feels like I can finally see all the pieces that will bring the project together, but there's so many and there so scattered and in disarray, I hope we can just get enough of it together to be presentable at this point. There's still time though so maybe I'm just a pessimist who needs to work harder.





On that note, here's a comic that feels really relevant for me right now hopefully ya'll will get the joke.

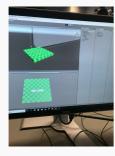


#### 🖿 REU|2018 🛛 🖳 Leave a reply

### **Game Development and Internet Problems**

#### 🛗 June 21, 2018 🛛 💄 sterry

Despite how those two things in the title might seem related, they are not in any way related in this post.



Starting with the positives, I finally made a thing in unity. Its nothing super complex or even much of a game, but I like it anyways. It's basically just a grid of blocks, but what you can't see in the picture is that I got the blocks to slowly float up and down giving it that video gamey effect. I would make it into something interactive later, but unfortunately I didn't save the file after building it, so we'll have to see if I get the encouragement again. Its basicallys 2050.

We also started our "Deeper Dives" which is essentially just a way for us to learn and design a project in a topic we're interested in, but might not have much experience with. I chose 3D printing because of my experience with it in the past also it's the coolest topic. I figured if I learned enough, I might actually be able to make it relevant as an engineer one day.

And now onto the sad part. I've literally been trying to get the ethernet port in my bedroom activated for this entire week. I called IT on Monday and they said there was no problem, they just needed the MAC Address. Unfortunately I didn't have it at the time and they were about to close so I called again Tuesday. Tuesday a different operator said he



had no idea what that other dude was talking about and that I had to contact Housing to get my Access Account activated and then active the ethernet from there, but unfortunately Housing closed 2 hours prior, so now it's Wednesday.



Wednesday I call housing early in the day this time and they tell me I have to call another number to get my problem fixed. And guess who it was... I'll give you a minute to think... IT the people who told me to call housing!!! So now I'm called IT again frustrated, talking to another man from there department who has no idea what to do and he says he'll ask around and send me an email. Got an email shortly afterwards saying now all they need is my ethernet jack number, which of course, I can't get until after work, after they close. So I sent the port information today, probably to the fourth person from IT who is probably very confused, and I'm waiting for them to get back to me. All this work and effort just to get an Xbox online is starting to get a bit frustrating.

The comic from last post would have perfect for today, but since I already used it here's another as thanks for sitting through that rant.



Image: REU|2018 Section 2 Replies

### **Social Interaction and Gifs**

June 19, 2018 sterry

Well now that that's out the way lets get into the blog.



I attempted to be social with my REU mates yesterday despite my inherent urges to hide away like a hermit. Me, Gabriel, Ahmed, and



Mary kinda Aldan too played some Jackbox and I would say had a pretty good time Everyone except for Aldan I suppose. For those of you who don't know, Jackbox is a video game with a bunch of mini-games you can play with a group of people, some trivia and similar stuff.

I also didn't do most of the stuff I said I would yesterday, but I ate a whole can of green beans, so that's something.

My research group got to talk to our PI and grad student and undergrad student. Dr. Stone, Tom, and Kewin respectively. We got some further clarity on our tasks and action items for the week as well as a timeline on some of our goals. I appreciate how much Dr. Stone interacts with us, we usually see him at least 3 times a week and I feel like he helps keep everything together.

We also go off on some fun tangents during conversations, so I never dread going into meetings with him. Just a few topics we've discussed during our meetings include. 'Best actor portrayal of Batman' Adam West Obviously, 'If Nearly Headless Nick died on Hogwarts Premises' Harry Potter reference, 'Is Sharknado 1 or 2 the best movie of all time' Jury's still out on that one, and most recently 'Bitcoin's nefarious uses' Tamer conversation then usual. If it wasn't clear I really like my group.



Today we also had a luncheon lecture from PhD Candidate Sherry

Berghefer, she talked a lot about her research in hyper-realism. She shared a lot about how she studies how easily people are deceived by fake images that have been modified or are fully computer generated or modified. One of the coolest things she showed was this ipad finger drawing of Morgan Freeman that looks more realistic to me than a real picture of Morgan Freeman. To be clear, ALL of these pictures are drawings from the same person, even the last one which is crazy.



And now for the comic of the day.



🛅 REU|2018 🛛 🛄 1 Reply

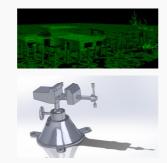
### **Resetting the Counter**

🛗 June 18, 2018 🛛 🚨 sterry

It was a fun streak while it lasted. Back to irregularly scheduled posts.

Guess I have a few days I need to catch ya'll up on.

Friday, we finished with 3D modeling in Maya. I really wasn't feeling that program so I was pretty happy about that. It felt really unintuitive and I think I just prefer the preciseness you get with Solidworks or AutoCAD. That's probably the engineer in me. That weird green one is Maya, I'm much prouder of the one to the bottom from solidworks. I had to do a lot of work to set constraints and mates to make it look and move naturally. That doesn't really show in picture well, but take my word for it its pretty cool.



This weekend I did some of the tasks I've been putting off But there are still so many more

We've been struggling in our project getting a program to work for our video feed. I've tried downloading probably 8 thing on my computer that all have different tasks of building, compiling, etc. And my laptop's starting to feel the strain. It was already slow, but now its basically crawling begging for relief.

We've got so much to figure out, and this is suppose to be the easy part because were really just using code that's already out there on the internet. But this setup is proving quite difficult. I might have to leave it to the more capable members of my group who have more capable laptops. Here's a video of the drone running though from a laptop which was pretty cool to do.

#### IMG-3591

I also bought that TV I was talking about. Its already so much better than that projector I had and its literally half the price of that other hunk of junk. Only thing no is the wifi doesn't seem fast enough for the games I'm trying to run so I have to get the ethernet set up in my room. There's suppose to be a way to do it online, but i couldn't find the form so I guess I'll email someone about it after I put this post up.

I bought canned vegetables and fruit and boxed mash potatoes so I finally had a decent meal for the first time in weeks I could hear my body thanking me. It takes a little more time to make but not too bad so I'm gonna start some good habits. That reminds me I'm gonna go to the gym today, try to get a schedule of at least a few times a week not like I have much else to do after work.



And to close here's another one of those comics that I love. Got a real gutbuster for today.



🛅 REU|2018 🛛 🖳 Leave a reply

#### New Format

🛗 June 13, 2018 🛛 💄 sterry

Welcome back to the twilight zone,

I'm doing pretty well at this post a day thing so hopefully I won't mention it in every post for much longer. So congrats to us for 3 days straight.

I've been trying to think about what I want this blog to be other than just my boring experiences so I thought of an "exciting" way to end all my posts more on that later.

So my favorite game in the world is super smash bros and the new one was just announced and I'm super hype to get it when it comes out. Found out some other people here like smash too, but unfortunately none of us brought any consoles to play the game so... (tear face).



I bought this projector to start getting back into playing my xbox, but man, this might top my list on worst purchases ever right behind that \$150 controller I bought. I think I'm gonna return it and take my chances transporting a TV back to Delaware from here... I should probably get a cheap TV.



In work related news, I'm less help than I expected in the coding stuff, but more than I expected in the writing/communication stuff, so hopefully that works out for a while.

If anybody has some advice on some easy healthy food to prepare I'm all ears because my diet is officially as bad as it could be and I'm starting to feel it every time I move.



And to end this post I will now introduce my "random meme of the day". Totally stole this idea from a previous REU year.

Enjoy



💷 REU|2018 🛛 🖳 Leave a reply

## **HCI and a Poor Transit System**

June 12, 2018 sterry
 Here's a couple bones I have to pick with ISU's bus system interface.



Case A. This door, I was stuck behind it for 2 very awkward minutes waiting for the driver to open it. Someone had to tell me you have to wave to open it. I've never felt like more of an idiot cause it technically does say that right on the door. But I'm going to blame poor design rather than myself.



Case B. This bus sign. No way of identifying which buses come past here, hat times said buses arrive or even if it's the north south west or east route. I was almost late to work because of one of these things.

💷 REU|2018 🛛 🖳 1 Reply

### **Me Rambling**

🛗 June 11, 2018 🛛 💄 sterry

"What is today, but yesterdays tomorrow?" - Eugene Harold Krabs.

If you are wondering why I posted 3 days after saying I would post tomorrow, here is a quote for you to reflect upon.

Onto other topics welcome back, I feel like so much as happened and I've taken so few pictures. Here's some I'm "borrowing" from some of my peers.



Here's a picture of us all at the ropes course. I believe I was eating a airhead in this picture thus that weird pose.





Here's me acting like I'm fixing a bike The bike was never broken.



Here's the fire department that came by Howe that one day the fire alarm went off.



And here's a picture of Terry Crews that makes me smile.

Speaking of terry Crews, he's gonna be in this new video game Crackdown 3 that I'm really looking forward to. And E3 just started so I might have alot more to say about video games in the near future.

Well, just a quick update and I'll be sure to get back with all of you "tomorrow".

💷 REU|2018 🛛 🖳 Leave a reply

### **Stormy Days and Late Blog Posts**

🛗 June 7, 2018 🛛 💄 sterry

Well here we are again nice to see you.

I see that some people do read the blogs, It's good to know I'm not talking to an empty room. Hopefully that'll encourage me to start doing this daily like I'm suppose to.

But anyways quick update

- 1. I broke the drone so maybe no pictures of that for a while. I wont be taking one of those home again.
- 2. Tornadoes are real and I want to record one, no matter the cost
- 3. Doing simple stuff in C++ is easy, Error validation, almost impossible. In my case absolutely impossible
- 4. Professors and Graduates seem to really like ISU. Maybe I'll understand why one day.

I've also attached a video of the storm I was in so have fun watching my misery, Only if you're on an Iphone; sorry everyone else.

Thanks for sticking around. We'll catch up tomorrow.

https://projects.vrac.iastate.edu/REU2018/wp-content/uploads/2018/06/img\_3544.mov

## **Getting Adjusted**

🛗 June 5, 2018 🛛 💄 sterry

Back again, once again

Just a heads up not a big picture taker. Hike to live in the moment.

But we just got a drone that can takes pictures and videos so maybe expect some of that sometime soon.

On that note my group has now gotten together several times and we are getting a better idea of what our summer project will be like. It seems that Dr. Stone is giving us a lot of freedom to do something that interests us, but I can tell were having a had time figuring out what that is.

Chances are we'll just go back to what the idea that was originally pitched to us being developing a algorithm for drone control in a clearing operation for a fleet of drones to be used by law enforcement. And then deciding what type of user interface is best for that. I'm looking forward to trying VR.

But yea, what else is happening... Living situation is nice, lot to clean, but I don't mind too much. Eating habits are getting poorer everyday... lots of ramen and cereal but it tastes good so not complaining.

I wonder if any of my peers in the REU read these things. I know I haven't read any yet.

If any of you are comment your favorite food. I'm just generally curious.

Signing out.....

💷 REU|2018 🛛 🖳 6 Replies

## "First" Post

🛗 June 3, 2018 🛛 💄 sterry

Hello World again,

Nice to meet you, my names Stephan Terry and I'm looking forward to blogging with you today.

A little about myself, (thanks for asking), I am a student geting my bachelors in Aerospace Engineering at the Pennsylvania State University, Class of 2020. Im currently at the SPIRE-EIT REU in Iowa State (you probably already knew that last part), and this summer my research project is titled Human Performance Extension via Drones (more on that another day).

I'm not as much of a talker as I act like I am so this might be a shorter post. Maybe I'll give some highlights of the things I enjoyed and learned during the day.

1. Myer Briggs is cool but fake

2. Databases are useful and complicated

3. The C6 has an operating cost of \$300 per hour. totally worth it

4. VR and AR make for really fun video games. probably other stuff too

5. If you go to Fuzzy Tacos, just buy the chips and queso, its unlimited and like \$4, plus if you get a courtesy cup they'll never know if there's Sprite in it so dont spend extra on their fancy hard plastic cups.

EU|2018 Que the second second

©2018 Iowa State University, Virtual Reality Applications Cen