

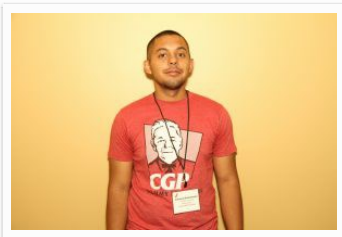
REU|2017

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



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Emanuel Bustamante



The Final Week



Posted on August 1, 2017 by emanuelb

I feel like I've been in Ames forever, but at the same time, I feel like I just got here. In reality, the program is only ten weeks long, so just got here is probably more accurate than forever. What makes my time here feel so long is the growth I've seen. Earlier this week, my group and I submitted our poster, which made me realize that our research project grew from a question to a full blown experiment with participants, data, and graphs. Something else that has grown is the relationships between the people in the REU. We've done a lot together. We live with each other. We work with each other. We hang out in each other's apartments. We do fun things on the weekends. There's definitely a sense of community. I'm glad I came. Here's a picture I took on the kayaking trip a couple of weeks ago:



Here's a picture someone else took:



That's all for now.

-Emanuel

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Presentations and Ruminations



It's been a busy week. We presented our Major Course Assignments (MCA) on Monday, presented to Jon and Kelly on Tuesday, and we're presenting to an REU in California today. The MCA presentations went well. I enjoyed the walk-through presented by the 3D printing group, the look of the farm the shaders group, and navigating Austin's environment. The presentation we gave on Tuesday was to get practice and feedback for today's presentation. Jon and Lucia had some feedback, but the overall consensus was that we did a decent job.

Yesterday, the luncheon lecture guest was Elliot. He talked a lot about his experience with start up companies. Two things stuck out to me; one was that the people you want starting a company with you are the people you can fight with and depend on to come back the next day; the other was that going to grad school gets harder as you get older because you accumulate more commitments. I've made it a point recently to be around people that I can fight with. I don't mean that I want to constantly fight people. What I mean is that I want to be able to fight with people productive way. Concerning commitments, I have some that I'm not sure how to handle.

Outside from work, things are going well too. I lost five pound, and I started running more regularly. Today I got an email asking me to choose a move in time for my dorm in the upcoming semester, and I was genuinely excited. In addition to that, I got a reply back from one of my professors concerning my senior honors project. Senior year is coming fast.

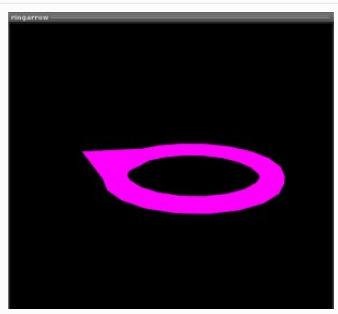
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Pink Circle of Death

2

Posted on July 6, 2017 by emanuelb

The project is coming along well. The mechanics of each of the three interfaces are working, the triangles for the experiments are being generated, and we're working on ways to collect data. What isn't going well is orienting a small a pink circle for trackpad rotation; I've been trying to get it to work for so long. I hate the pink circle.



Posted in Uncategorized | 2 Replies

Weirdness and One-liners

1

Posted on June 28, 2017 by emanuelb

It's been over a week since I last posted. Several things have happened since. First, we went to the art festival Des Moines twice. The first time was last Friday night to go Saint Motel. Before the concert, we stopped at this weird restaurant. Directly above out table was a painting of a woman lying on a couch; the bottom half of her was covered by a blanket and the upper half of her was covered by only a bra. Above her was a painting of herself lying on an identical couch but facing the opposite direction. The waitress introduced the food by saying it was composed of all of the ingredients no one will by. I decided on the quail, which was prepared like popcorn chicken, and apple coleslaw. Equally weird was the art festival. At some point, people were hanging from ropes pretending to be pack-man. The second visit to the festival was the following morning. I had a chicken shish kibab for second breakfast (please don't tell my orthodontist) and saw some very cool art. My favorite piece of art was a photograph of a ballerina holding a guitar during a gran battement. Who would have known ballerinas are aesthetic?

The research project has been coming along. We've shifted from reading papers to coding the interfaces and creating the environments. I was in charge of mapping trackpad input to rotation angles. After struggling for several days, I asked for Devi and Alfredo for help. Then all of a sudden, on the way back from the bathroom, I realized it could be done in one line. Coding is cruel mistress.

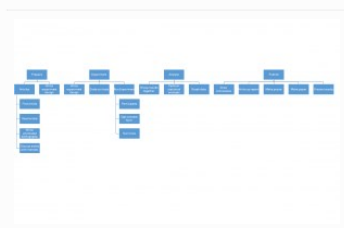
-Emanuel

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HCI Project Analysis

1

Posted on June 25, 2017 by emanuelb



Here is the affinity diagram we made for completing our research. We broke it up into four main tasks: preparing our experiment,

performing our experiment, analyzing our results, and then writing about the results. Alfredo took the lead on creating the diagram; he wrote on the white board while me and Devi listened to him and made suggestions. In typical Nav team fashion, we would occasionally get sidetracked on an argument. My biggest contribution was clearing up misunderstandings and bringing the conversation back to the affinity diagram.

Posted in Uncategorized | 1 Reply

Blurring the line between man and car

5

Posted on June 18, 2017 by emanuelb

A lot has happened since the last post. First was my first proper attempt at bouldering. We all met up at the state gym to either climb or boulder. Anna confirmed that bouldering is more hardcore, so I decided to boulder. At first it wasn't too bad, but then Natalie informed me that I was cheating because I was using the holds for paths I didn't start. It made me reevaluate my notion of how good at bouldering I am, but it also reinforced my observation that sports are a lot easier when you're cheating. Such is life. Here's a picture that Natalie took; the people in the group make me want a camera:



Second, we went to the farmer's market on main street. I had to take cash out to buy a barbecue bowl (second breakfasts are absolutely essential) and experienced quite the dilemma. The only ATM was at Wells Fargo (Chase, you need to get it together and open a branch in Ames). I overheard a lady also looking to take out cash, so I asked her where the ATM was. She informed me that she walks up to the drive through ATM—the only ATM. We walked up posing as cars and without the slightest suspicion. I liked her. She had chutzpah. I bought fancy soap, Sushi bought very nice guitar, and Natalie played some very nice piano music.

Third, we made a trip to Walmart. I know that that last sentence sounds mundane, but if you were there, and you saw the things that I saw, you would say the trip was nothing short of a grand spectacle. Shopping went well enough. I bought food, toiletries, and for the first time ever, shoelaces. The trip back was when hilarity ensued. We embarked on a trek back to Freddy despite the fact that we bought far too much to carry. Little did we know that the plastic bags holding our groceries were on the brink of tearing. The first casualty was my greek yogurt (a great source of protein); it fell out in the middle of an intersection. As I stood there physically paralyzed by the sheer destruction taking place before my eyes, my fellow REU partakers picked up the yogurt. The second casualty was my olive oil. Sofia took it upon herself to dive into the intersection for it, which I greatly appreciate. Kate took it upon herself to stop Sofia from dying, which I also appreciate.

Having successfully made it back from Walmart, we grilled some burgers, listened to some music, and tossed around a frisbee. I am surrounded by great people and a beautiful town. Life is good.

-Emanuel

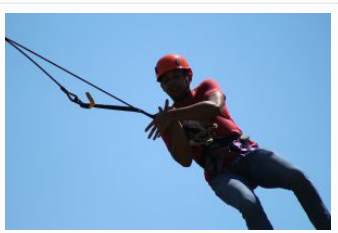
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Trust

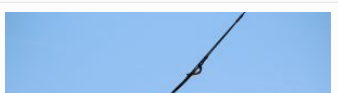
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Posted on June 12, 2017 by emanuelb

The centerpiece of last weekend was the ropes course. The ropes course entailed a trust fall. I suspected that this trust was going to be over some sort of patting, but it wasn't. It was a drop from a platform into the arms (hopefully) of the people here at the REU. I went first, so I felt pretty confident going into the next event, a swing from thirty five feet up in the air. When it was finally my turn, it was a lot higher than I expected. To better understand the drop, here is a picture of me attempting to contain sheer terror:



Here is a picture of me once I stopped falling and started swinging:





And here, if you look closely, you can see hints of the giant tear in my pants:



The final and most terrifying event was climbing. Not only did we have to climb a giant tower; we also had to manage the ropes for people who were climbing the giant tower, which was terrifying. I managed the ropes for Angelica. When she jumped down from the top, I was not 100% sure she would be okay, but it all worked out, which gave me more confidence for when I had to climb. The next day some of us went grocery shopping together, and later that night, we all hung out and ate pancakes, rotisserie chicken, fried chicken, cookies, and chips and salsa. Chris even ate a combination of three of those things; I'll leave which three to your imagination.

-Emanuel

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Pecs and Code Names

1

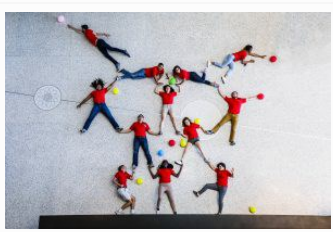
Posted on June 9, 2017 by emanuelb

I was supposed to write a blog a yesterday or the day before, but I forgot to. We had C++, a lab meeting, and then a Craft of Research meeting. Needless to say, things are starting to pick up. I've more papers in the past few weeks than I have the past school year. On Tuesday, our next meeting with John and Lucia, I have to give a spiel on a thirty-one page paper. We'll see how it goes.

I finally went to the gym here. It's awkwardly quiet there, but it's made up for by the wall mounted pull up bars. I did squats, stiff-leg deadlifts, a chest press machine, and finally a rowing machine. I really like the chest press and rowing machines. They don't have them at my school gym.

Yesterday afternoon was fun. After a shirt planning fiasco, I went to go get boba tea. After that we played Code Names for a few hours—apparently “bike” and “lap” are related because when you ride a bike, “your lap’s” there). Then we watched the first part of Hamilton again. Then I went to sleep. It was a full day, but it was an enjoyable.

Here's a cool picture we took:



-Emanuel

Posted in Uncategorized | 1 Reply

Accidentally watching a musical

3

Posted on June 6, 2017 by emanuelb

So far, I've read two papers. I'm very impressed with myself. I thought reading papers was going to be a painful process, but it's not that bad. I'm making a stack of sticky notes on my desk—each one corresponding to a paper I've read—so that I can physically see how much experience I'm gaining with reading scientific literature.

I've learned more about the musical Hamilton in the past 12 hours than most of the humans on the earth. Last night, some of the people from the REU came over, and we just wanted to check if the video worked, but before we knew it, we had spent three hours watching the entire play, and we had listened to all of the cut songs. My favorite character was the King of England.

-Emanuel

Posted in Uncategorized | 3 Replies

Sweat Sunday

Posted on June 5, 2017 by emanuelb

Yesterday, we went to a nonprofit that fixes and gives out bikes. The deal between the REU and the non-profit was that we work for them for a while and we get bikes for the summer. There was a guy named Mike there. He was drinking beer and he showed us an AK-47 that he converted into a sprinkler; when he was twelve, he hopped 5000 consecutive times on a pogo stick.

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Post Two

Posted on June 2, 2017 by emanuelb

Apart from coming up with ground-breakingly creative blog titles, I spent time today taking a personality test. The result of the test was that I have no strong disposition to between extroversion or introversion, I have a slight preference for perception over judging (feeling things out over planning), and I moderately prefer sensing and feeling over intuition and thinking. By far what was most interesting were the careers recommended for me: graphics design and multimedia, interior design, and artist/ animator. I usually have to ask girls what matches, so I'll take those with a grain of salt. The next most interesting thing was how my teammates scored on the personality test. Devi had an "J" instead of an "P", which means that she likes to plan things out (she's enthusiastically confirmed this). This focus on planning will be good. Alfredo also had a "P", but I suspect his "P" more prominent than mine. I think he will randomly thing of good ideas. He will be the Charlie Day of our group, the wild card:



That's all for now.

-Emanuel

Posted in Uncategorized | Leave a reply

Blog One

Posted on June 1, 2017 by emanuelb

Today is my third day in Iowa, and I still can't believe how green everything is, I saw 5 rabbits on my run last night. Even more amazing, me and my roommates have established a habit of washing our dishes immediately after using them; it helps only have four dishes. Project wise, we haven't started anything yet, but I'm excited to do so.

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