Definitely this week we are making progress. Our main goal this week was to modify the Network on Chip Simulator, and make it behave like we want. Our modifications should make the simulator work with buffered links, which is the improvement made to the links in order to use less buffers and therefore less power and area.

Justin (undergrad working with me) and I went to the lab earlier this week to discuss how we can make these modifications to the code. We throw some ideas and some logics, and we also choose which kind of data structure we were going to use. After finishing our brainstorming, we were ready to insert code. But first, Lei (PhD student) gave us an overview of the code and how it works in order for us to be able to add code the algorithm.

Before begin inserting code in the simulator, I wanted to test if our logic was going to work like we wanted to. I wrote a very simple simulator testing our ideas and logics, and the code was working like charm. After that, Justin and I were ready to insert the code into the simulator. Unfortunately, there was a problem with our servers, and we weren’t able to access the source code of the simulator until Friday.

After inserting the code the simulator, we got some run time errors. We then begin to debug the code (which wasn’t easy due to the large amount of code). Since the simulator is run on Linux, the debugging was somewhat painful, and we lost lots of time using it. We were able to correct the majority of the errors (which most of them were syntax errors), but we were fighting to correct them all. We could get the simulator to run more than half-way, but it suddenly crash due to an assertion fail. We know why the error is produced but we were working hard to resolve it.

Our batteries were pretty drain, so we let the simulator alone, and agree to keep working on it the next week. Probably we are going to work on it on next Thursday or Friday because we are going to Austin,TX. I’m really looking forward to it!