Travel Report

At the TeraGrid conference, we got a better understanding of just what TeraGrid actually was. Used by different people who have different careers in the scientific field, TeraGrid is a huge portal created to help those people to be able to do research and connect with other people so that their ideas can be posted on the portal and those people will be able to communicate with each other to further discuss information about data.

On Monday, the day was strictly for students to learn what the TeraGrid is, what areas can be covered by it in terms of who can use it and what for, and what purpose might other people besides people in the computer science field would like to use it also. It was discovered that people could use the TeraGrid portal to discuss their research with other colleagues and submit graphics and images on the portal for the other scientists to view it, discuss it, or critique/comment on the results.

On the second day, I was able to go to a Science Track session where I learned about some of the different science-type subjects that were being discussed via the TeraGrid portal. The speakers all discussed the concept of the research of protein-foldings and how they were able to compare their results through the TeraGrid to reach their conclusions. With the graphics, the speakers said would not have been possible to obtain without the help of Adobe Photoshop or a C++ program. The graphics were animated figures to display what the proteins look like when they were folding and what occurs to make the protein start folding. Also, one speaker talked of an electronic model called the NEMO, which have been recently upgraded to the OMEN which is just a better model of the NEMO.

On Wednesday, I attended the EOT Track Session where it focused on high school and undergraduate students to get involved with the science field. There were speakers who gave the high school students the opportunity to put a CPU together which the students thought initially that it was uninteresting and boring, but once they got the hands-on experience, many of the students said that computers would be a career that they might would want to look into when choosing what they wanted to do in the future. The speaker also said that they conducted an experiment with the students to see how the students would do in logical thinking. To carry out this experiment, they used a Sudoku puzzle which does good for seeing how a person could do in their logical thinking. Though she said that the students took 20 minutes with an easy puzzle, when they tried again, their timing had greatly increased for their next trial took only about 10 minutes to complete the puzzle. But with other students, she told us that they used a Sudoku solver from the Internet.

For the undergraduate students, the speaker told us that the college that he teaches at, Purdue University, participated in the annual SC challenge which consists of students

participating in the challenge of building a cluster from scratch that uses less energy and can use the most nodes. We were informed that any college can participate in it, but it is a very demanding challenge for the students.

The last day, we attended the last speaker before we would leave and stayed so that we could hear who the winners of the poster session was. Before that happened, though, we got the chance to hear what the future plans for the TeraGrid was, which was they were becoming bigger and going to go through a name change from TeraGrid to XD.