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Mahamat Oumar

Pearc17 conference

07/14/2017

### PEARC 17 Conference

Practice and Experience in Advanced Research Computing (PEARC) used to be hosted by the Extreme Science and Engineering Discovery Environment (XSEDE) is a conference series that discuss challenges, opportunities, and solutions among HPC center directors and managers, computational scientists, end users, students, facilitators, educators, HPC system administrators and user support staff, as well as industry and government agency representatives from across the United States and around the world.

Practice and Experience in Advanced Research Computing 2017 (PEARC17) conference was held in New Orleans, Louisiana at Hyatt Hotel from July 09, 2017 to July 13, 2017. The theme of this year's conference was "Sustainability, Success, and Impact". The sponsoring agencies and organizations include the Advancing Research Computing on Campuses: Best Practices Workshop (ARCC), the Science Gateways Community Institute, the Campus Research Computing (CaRC) Consortium, the ACI-REF consortium, the Blue Waters project, ESnet, Open Science Grid, Compute Canada, the EGI Foundation, the Coalition for Academic Scientific Computation (CASC), and Internet2.

Sunday, July 09, we, four weeks coding institute team, landed in New Orleans. It was an amazing travel. The PEARC17 general chair Dr. David Hart from NCAR welcomed us at the Welcome Students event. That was the first event of the conference. The exhibitors chair Dr. Melyssa Fratkin from TACC introduced us to PEARC17 and talked about the students' volunteer shifts. We had two guest speakers from the FBI, agent Tracy Smith and agent Tracy Len. The agents talked about Cyber Security and the different cases that they handled. We also had two guest speakers from the New Orleans Sheriff's office, officer Scott and officer John Tall. They talked about the city security and advised the attendees to keep safe. I remembered at the Students Welcome event, Adam Bill, a student from the University of Illinois, asked if we could have more free food, and the answer was Yes. That was the first and the funniest question of The PEARC17 conference.

Monday, July 10 early in the morning, the tutorials began. I signed up for two sessions; one was an introduction to Python tutorial and the other was Python's Data Scientist Tool Box. The introduction to Python session was a hands-on tutorial and covered everything needed for the Modeling Day. It was fun and entertaining. The second tutorial was more advanced. We used some python libraries such as Pandas and Plotly to analyze and visualize data. Later in the evening at the Student-Mentor dinner, I met one of mentors, Dr. Horst Severini, a research scientist from Homer L. Dodge Department of Physics and Astronomy. He did his graduate school and his doctorate at the University of Oklahoma. He finished his undergraduate school in Germany where he is originally from. We talked about what degree I'm aiming, the projects that I am working on, the careers that I'm interested in, and the internships opportunities. It was so

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nice meeting him. I also had the chance to take a tour around the city at night. New Orleans is beautiful and the people are lovely.

On the following day, we had the student modeling day. That was the most interesting conference activity to me. It was very important as well. I gained some knowledges and skills such as team work, competition, data analysis, using Matplotlib to visualize data with graphs, and more. My team and I modeled the skydiving of the parachutist Felix Baumgartner who set world records for skydiving an estimated height of 39 Km, reaching an estimated top speed of 1357 Km/h. He became the first person to break the sound barrier without vehicular power relative to the surface on his descent. It was a beneficial activity. Later that day at the Students Posters reception, I met Dr. Alissa John from The University of New Orleans. She has a Doctorate in Mathematics. We talked about applied mathematics and physics. She inspired me very much and encouraged me to keep pursuing my studies in mathematics.

Wednesday, July 12 at the Student-Mentor Lunch, I met my second mentor, Dr. Henry Neeman from the University of Oklahoma. Dr. Henry Neeman is a man with a strong personality; I admire him very much. He was friendly and fun. He has a Doctorate in Computer Science. He is so knowledgeable in different areas of computation, and he answered every question I had. We spent most of our time together talking about Software Engineering and Data analysis. I also had the chance to ask him about internships opportunities. He will keep me informed about any opportunity. I enjoyed the time I spent with him. Later at the Student-Exhibitor Speed Networking, I met Dr. Xuizin from the University of Cincinnati. He is a computer genius who launched two big software of his own. Dr. Xuizin inspired me very much as a software developer and deepened my passion for software engineering. He was also funny, and I liked the yellow bow tie that he had on. He was such a nice person.

Last day of the PEARC17 conference at 11:00 A.M, Thursday, July 13, my team, I, and the other groups presented our models. There were 6 groups. Two groups did the Felix Parachute Model, three others did a Malaria project, and the last did a Zombie model. The presentation was well organized. Every group made graphs for visualization. It was a ten minutes per group presentation with at least eight PowerPoint slides. The last lunch of the conference came right after the presentations. The foods were flavorful. They recompensed the hard-workers at the end of the lunch. It was a short award event. An hour later, the PEARC17 journey has just ended and we were ready to head to the airport. At 4:00 P.M, we, four weeks coding institute team, flew from New Orleans, Louisiana to Atlanta, Georgia. At 8:00 P.M after the stop, we took the second flight to Norfolk, Virginia and we rode a van from there to here, Elizabeth City State University. It was an amazing journey. I learned a lot and enjoyed my time at the PEARC17 Conference.