VizVignette

REU Site: Collaborative Data Visualization Applications @ Clemson University

July 2014 Volume 1, Issue 1

Special points of interest:

- REU Site Coordinator, Vetria L. Byrd, Invited Plenary Speaker at XSEDE14
- VizREU Site goes to XSEDE14, Atlanta, GA
- VizREU Students received travel awards from XSEDE14
- Collaborative Grant with University of Texas in Austin funds participation of VizREU Students in XSEDE14 student poster competition

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VizREU Site Goes to XSEDE14, Atlanta, GA

The entire VizREU site was in attendance at The Extreme Science and Engineering Discovery Environment (XSEDE) Conference July 13-18, 2014. For many, if not all, REU participants attending XSEDE14 was their first time attending a professional conference. For five of the REU participants, it would be their first time presenting their work in a conference setting.

REU Site Coordinator, Vetria L. Byrd, teamed up with REU Site Coordinator, Samuel Moore at the University of Texas at Austin, to write a collaborative supplemental grant (NSF Supplement -- OSP 201302511-004) that would fund the participation of students from both REU sites (5 from each site) to attend XSEDE Conferences.

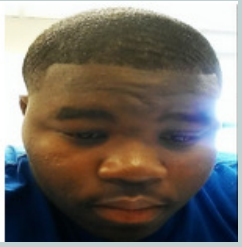
Why XSEDE? XSEDE provides a student track that affords students a comfortable but professional setting to present their work and learn how digital resources can be used to further their research or career goals. For the VizREU Site participants it was an opportunity to see the role visualization plays in all levels of scholarship, to become a part of a larger cohort of researchers, meet others in the field, and get valuable feedback on their work. This was the first year an entire REU SITE was in attendance at an XSEDE Conference. ◊

VizREU Students Awarded Travel Grants to attend XSEDE14

Three VizREU Participants were awarded XSEDE14 Student Travel Grants to attend the conference. Travel grants included shared room at the conference hotel for 4 nights, conference registration with tutorial, some with limited mileage covered. The following VizREU Students were recipients of XSEDE14 Student Travel Grants: Kenneth Curtis (University of Alabama at Birmingham), Hali Gallagher (Coastal Carolina University) and Mokell Moses (Norfolk State University). Funding was provided by the CI-Practitioner Program managed by Galen Collier at Clemson's Computing and Information Technology Department, for VizREU Participant, Asher Sampong, (Fort Valley State University). All VizREU Participants provided written summaries of their XSEDE14 experience. Summaries of their experiences, in their own words, can be viewed from the VisREU website http://citi.clemson.edu/viz/reu/REUXSEDE14.html

Kenneth Curtis
Student Travel Award

Hali Gallagher
Student Travel Award



Mokell Moses
Student Travel Award

Asher Sampong
CI-Practitioner Award

VizREU Students Participate in XSEDE14 Student Poster Competition

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~ VIZREU ~
FACILITATING THE ENCULTURATION OF UNDERGRADUATES INTO RESEARCH THROUGH VISUALIZATION

CLEMSON
COMPUTING AND INFORMATION TECHNOLOGY

Research Experience for Undergraduates

What's Next?

1st VizREU Final Presentation/Visualization Showcase

- Friday, July 25, 2014 1:30 PM
- Clemson University's Digital Resources Laboratory
- The event is open to the Clemson University Campus
- Mentors and collaborators are invited to attend

Five VizREU participants were given the opportunity to attend their first professional conference and participate in the XSEDE14 Student Poster Competition. Their poster topics represented the interdisciplinary nature of the VizREU and research projects. The purpose of the VizREU is to provide a research experience in visualization where participants gain an understanding and appreciation for the visualization process, apply the knowledge they learn to real problems, contribute to scholarly work and advanced the visualization aspects of their research project forward. For more information about the projects hightlighted here visit the VisREU web site at http://citi.clemson.edu/viz/reu.

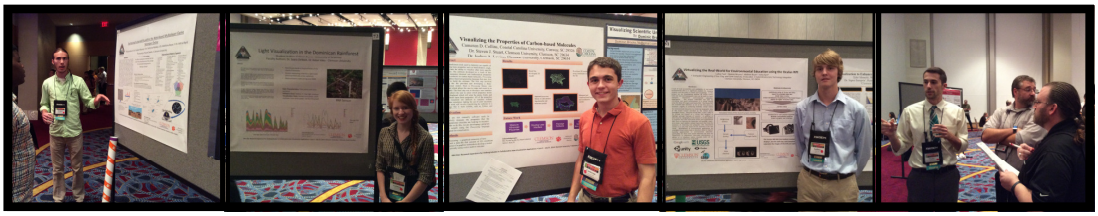
Bosch, M., Moysey, S., Mobley, C., Boyer, M., Byrd, V. Expressing Sustainability within the Web-Based Multiplayer Game Naranpur Online. XSEDE14 Student Poster Presentation, July 2014, Atlanta, GA.

Burns, C., DeWalt, S., Byrd, V. Light Visualization in the Dominican Rainforest. XSEDE14 Student Poster Presentation, July 2014, Atlanta GA.

Collins, C., Stuart, S., Levine, J. Visualizing the Properties of Carbon-based Molecules. XSEDE14 Student Poster Presentation, July 2014, Atlanta, GA.

Fant, L., Moysey, S., Boyer, M., Byrd, V. Virtualizing the Real-World for Environmental Education using the Oculus Rift. XSEDE14 Student Poster Presentation, July 2014, Atlanta, GA.

Slonecki, T., Sarupria, S., Levine, J. Visualization to Enhance Rare Event Simulations of Ice Nucleation. XSEDE14 Student Poster Presentation, July 2014, Atlanta GA.



Michael Bosch | Colleen Burns | Cameron Collins | Luther Fant | Tyler Slonecki

An Impromptu Peak at Augmented Reality

Perhaps one of the most engaging moments for VizREU students at XSEDE14 occurred while taking a break from conference events. Seasoned conference attendees know it is during networking sessions and coffee breaks where introductions are made, conversations started and collaborations spawn. VizREU students (Hali Gallagher, Michael Bosch, Colleen Burns and Cameron Collins) were treated to an impromptu demonstration by Dr. Alan B. Craig on augmented reality. Students were fascinated and intrigued by the interactive nature of Dr. Craig's work and the numerous applications where augmented reality can be useful. Gauging student reaction, one would venture to say, this interaction was one of the highlights of the conference for VizREU participants. Dr. Craig is the Associate Director for Human-Computer Interaction at the Institute for Computing in Humanities, Arts, and Social Science. He is also a researcher at the National Center for Supercomputing Applications. Alan has focused his career on the interface between humans and machines. He has been involved in many different capacities related to scientific visualization, virtual reality, data mining, multi-modal representation of information, and collaborative systems. He has been with The National Center for Supercomputing Applications (NCSA) for nearly twenty-five years where he has aided scientists in adopting high performance computing technologies to advance their research. ◊