Research Experience for Undergraduates in Collaborative Data Visualization Applications

CLEMSON UNIVERSITY, CLEMSON SOUTH CAROLINA

June 1, 2015 — July 24, 2015

Student Poster Presentations at XSEDE15: July 26-30, 2015

Five REU participants will receive travel awards to present their summer research at the Extreme Science and Engineering Discovery Environment (XSEDE[15]) Conference in St. Louis, Missouri.

http://www.citi.clemonson.edu/viz/reu

CLEMSON UNIVERSITY

Visualization is fundamental in understanding data from all aspects of research and scholarship.

About the Program

The program identifies research collaborators with visualization needs and assigns each student to a REU team. Each REU Team consists of a research/science collaborator, a visualization mentor and a visualization REU student. This arrangement fosters collaboration among team members, an appreciation of the visualization process and an understanding of the role visualization plays in discovery and analysis. Students will participate in activities as a member of their REU Team, their Research Lab, and their REU cohort thereby creating a rich, multidisciplinary research experience that will include enrichment lectures, hands-on workshops and social events. While broadening their knowledge of visualization students gain first hand experience in presenting their research at a professional conference. See XSEDE15 on back cover for more details.

2015 Viz REU Experience

Research · Experience · Undergraduate

Clemson Computing and Information Technology

Advanced Visualization

Summer 2015
Interdisciplinary ● Paid Research
8 Weeks ● Conference Participation

REU SITE: Collaborative Data Visualization Applications

June 1, 2015—July 24, 2015

REU Site: Research Experience for Undergraduates in Collaborative Data Visualization Applications

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VISUALIZATION
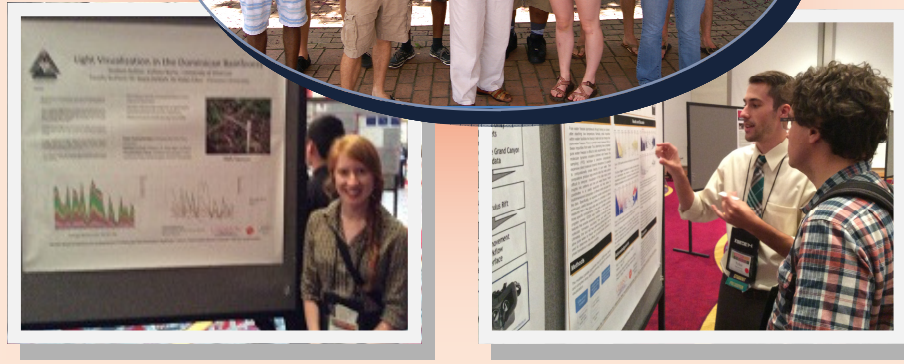### *A Catalyst for Communication, Conduit for Collaboration and Participation*

What is Visualization?

Visualization is the "process" of representing raw data in a visual format for the sole purpose of gaining more insight in to the complex relationships that exist within the data.

Why is Visualization Important?

Using visualization, researchers convert raw, simulated or observed information into a graphical format. Visualization plays a significant role in the exploration and understanding of data across all disciplines with a universal goal: gaining insight into the complex relationships that exist within the data. The need to diversify a field with such far reaching influences is imperative

REU Coordinator

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Cutting Edge Research Areas

Visualization ● Computer Science ● Genetics and Biochemistry ● Sociology ● Molecular Modeling and Simulation ● Inorganic Chemistry ● Social Media ● Parks Recreation Tourism Management ● Biological Sciences ● Digital Humanities and many more . . .

Why is THIS REU Important?

This REU site implements a research program designed to increase the number and diversity of students in visualization. Students gain both hands-on experience in the visualization process and valuable experience discerning important relationships that exist in data through analysis.

Clemson Computing and Information Technology: Advanced Visualization

http://citi.clemson.edu/viz/reu/