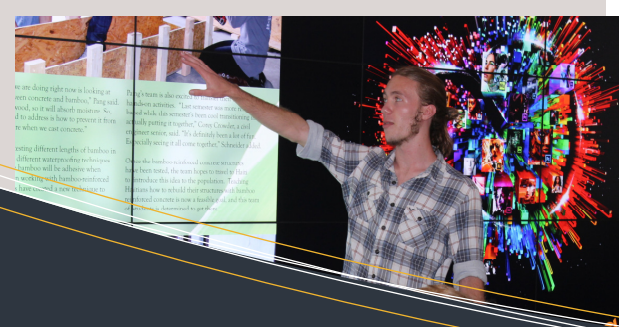


*Visualization is fundamental in understanding data from all aspects of research and scholarship.*



### 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.

## 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.



CLEMSON  
UNIVERSITY

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

REU Site Funded by NSF ACI Grant No. 1359223  
Vetria L. Byrd PI

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2015 Viz REU Experience

Clemson Computing and Information

*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

CLEMSON UNIVERSITY, CLEMSON SOUTH CAROLINA

June 1, 2015—July 24, 2015



## REU Coordinator

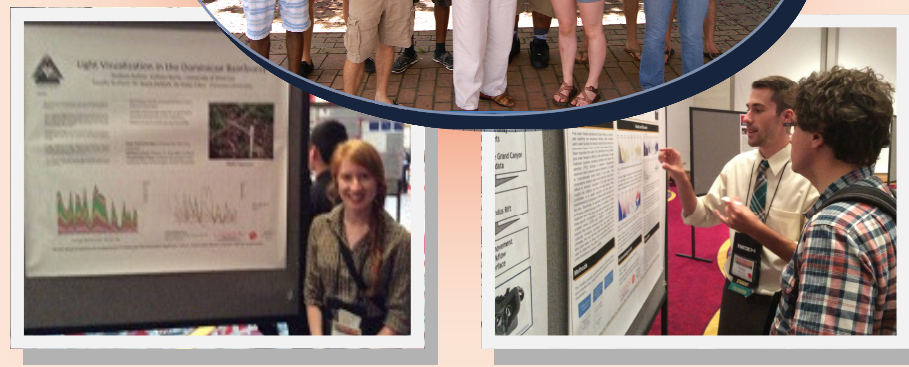
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## VISUALIZATION

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



## 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 . . .

## 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.

## 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. Students participate in mentored research projects in a number of interdisciplinary data driven research areas, with high-performance visualization needs.



Clemson Computing and Information Technology: *Advanced Visualization*

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