



# VizVignette

REU Site: Collaborative Data Visualization Applications

October 2014

Volume 1, Issue 2

## Special points of interest:

- VizREU Site among top 10% of hundreds of REU proposals submitted to NSF for funding.
- Top 10% of participating REU Students nominated by REU Coordinators or Research Mentors to present their research
- **Colleen Burns** (Saara DeWalt, Research Mentor) has submitted an abstract to 2015 Emerging Researchers National (ERN) Conference in STEM.



## In this issue:

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## VizREU Site Among Top 10% of REU Proposals



**VizREU Student Participant, Michael Bosch, and Vetria Byrd, REU Site Coordinator participating in REU Symposium at NSF.**

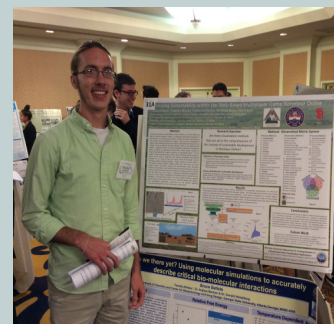
REU Site Coordinator, Vetria L. Byrd, and REU student participant, Michael Bosch, were recently selected to attend and participate in The Council on Undergraduate Research REU Symposium at the National Science Foundation (NSF) in Arlington, VA, October 26-27, 2014. The Symposium began with a congratulatory welcome for REU Program Coordinators and student participants. The REU Programs participating in the event were among the top 10% of hundreds of REU proposals submitted to NSF for funding for the past funding cycle. Likewise, student researchers participating in the symposium were among the top 10% of all student participants. It was truly an honor to be invited.

As part of the October 26th event sessions, a small section of the poster session was devoted to REU Program Posters. The REU Site: Research Experiences for Undergraduates in Collaborative Data Visualization Applications (Vetria Byrd, PI) was one of only 11 program (out of hundreds) selected for a program poster presentation. Priority for program posters were given to posters with a focus on assessment of an REU Site or Broadening Impact and Participation in an REU Site.

The Symposium is an opportunity for REU student researchers to present their research in a poster format to fellow REU students, NSF program directors, and other REU faculty. In addition, students attended sessions on career opportunities, in the science, technology, engineering, and mathematics (STEM) fields; learn about NSF funding available for graduate school; and participate in professional development sessions. ~ VByrd

## 2014 VizREU Participant Presents Summer Research at NSF

Michael Bosh was nominated by Visualization REU Site Coordinator, Vetria Byrd, to participate in The Council on Undergraduate Research REU Symposium in Arlington, VA after completing the VizREU Summer Program. The VizREU Site was hosted by CCIT. Michael worked with faculty researchers Drs. Stephen Moysey (Assoc. Prof. Env. Engineering and Earth Sciences), Catherine Mobley (Professor of Sociology), and Matthew Boyer (Assist. Professor of Digital Media and Learning) on a research project focused on defining ways of visualizing metrics of sustainability that are inclusive of environmental and socioeconomic indicators. The goal for Michael's summer research was to develop and implement these visualizations within an interactive online multi-player watershed management game that simulates an agricultural environment where players interact to impact the potential of a region to evolve as a "sustainable system." Michael's poster presentation, "Expressing Sustainability within the Web-Based Multiplayer Game Naranpur Online," was presented in the atrium at NSF.



For more information about Michael's project visit <http://citi.clemson.edu/viz/reu>

## Agent Of Insight (in Training): Michael Bosch on Participating in REU Symposium at NSF

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VisREU[15]

Program Dates:

June 1, 2015 - July 25, 2015  
<http://citi.clemson.edu/viz/reu>

~ VIZREU ~  
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VISUALIZATION**

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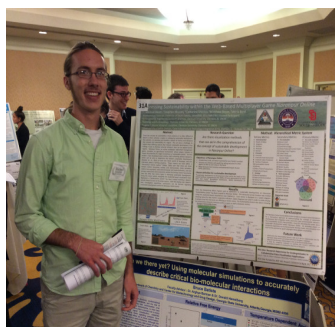


**VizREU @ The American  
Geophysics Union Meeting in  
San Francisco, CA. December  
15-19, 2014**

Sampong, A., Levine, J., Feltus, A.,  
Smith, M., Joshi, A., Sapra  
K. *Visualizing Gene - Interactions  
within the Rice and Maize Network.*  
American Geophysics Union  
Meeting (Abstract accepted for  
poster presentation).

Moysey, S. Boyer, M., Mobley, C.,  
Byrd, V. *Building Opportunities For  
Environmental Education Through  
Student Development Of  
Cyberinfrastructure.* American  
Geophysics Union Meeting  
(Abstract accepted for poster  
presentation).

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To be nominated, out of the other REU students and their projects, to attend this symposium filled me with so much pride and confidence in the research that I had done as a lot of my REU peers worked really hard on their projects and did a fantastic job this previous summer. Then, to be accepted to present at this conference, to be among the top 10% of REU students that were accepted to present, told me, "Hey, you must have done a really good job on your project." It also showed me that data visualization is extremely important in the field of research as well as outside that field as it applies to so much, if not everything.

Presenting at the symposium was, in itself, a major part of my REU project. Knowing that I would be presenting and getting feedback from the top 10% of my REU peers definitely felt intimidating. It seemed that all the other REU students presenting had projects containing a lot of data analysis and interpretation, whereas my project mainly focused on developing a visualization concept. I was surprised to see that a lot of people at the symposium were interested in the project I did and were interested in where I would take this project in terms of future research. Overall, this conference gave me a massive amount of confidence in the research I had done during my REU experience and has motivated me to submit my project to other conferences for presentation. ~ Michael Bosch.



**VizREU Student Participant, Asher Sampong, presenting  
at NABG Meeting, Richland, WA, September 17-20, 2014**

### Viz Bit

The VizREU Site is now advertised on the following web sites: NSF.gov, Pathwaystoscience.org, and webGURU. VizREU Site Program details are available at <http://citi.clemson.edu/viz/reu>



## Publications and Presentations

### Student Conference Presentations

Sampong, A., Levine, J., Feltus, A., Smith, M., Joshi, A., Sapra, K. "Visualizing Gene-Interactions within the Rice and Maize Network." AGU Fall Meeting, San Francisco, CA. December 15-19, 2014. Poster Presentation.

Sampong, A., Levine, J., Feltus, A., Smith, M., Joshi, A., Sapra, K. "Visualizing Gene-Interactions within the Rice and Maize Network." National Association of Black Geoscientists (NABG) Meeting, Richland, WA. September 17-20, 2014. Poster Presentation.

Bosch, M., Moysey, S., Mobley, C., Boyer, M., Byrd, V. "Expressing Sustainability within the Web-Based Multiplayer Game Naranpur Online." CUR REU Symposium, Arlington, VA. October 26-27, 2014. Poster Presentation.

### Mentor Publications and Presentations

Byrd, V. "REU Site: Research Experience for Undergraduates in Collaborative Data Visualization Applications - Broadening Participation in Visualization." CUR REU Symposium, Arlington, VA. October 26-17, 2014. Program Poster Presentation.

Byrd, V. "Incorporating HPC in Undergraduate Biology Education." The Banbury Center, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY. September 3-5, 2014. Invited Talk.

For an updated list of Publications and Presentations from students and mentors visit [http://citi.clemson.edu/viz/reu/2014REU\\_Publications.html](http://citi.clemson.edu/viz/reu/2014REU_Publications.html)