The REU/URE OMPS program objective is to promote the professional development of minority undergraduate students through their participation in ocean, marine and polar science research. The program consists of undergraduate students from minority serving institutions; each student was assigned to a specific research team, where they worked closely with a faculty mentor. In addition, seminars, lunch meetings, and social functions were organized to facilitate undergraduate interaction. The project was conducted for eight weeks during summer 2012, with online mentoring and follow-up during the academic year 2012-2013.

Upcoming Events

- 2012 IGARSS, Munich, Germany

- Science Cloud Summer School Course

- NASA NICE Summer Workshop

- Satellites & Education Conference

- National Technical Association Conference

- NASA NICE Webinar

- Celebration of Women in Math

- 9th AARSE Conference

- Supercomputing Conference 2012

- International Conference on Appropriate Technology

- AGU Fall Meeting

2012 Participating Institutions

- Rice University
- Mississippi Valley State University
- Spelman College
- Gettysburg College
- University of Ghana
- St. Augustine’s College
- Norfolk State University
- University of California LA
- Jacksonville State University
- Elizabeth City State University
- University of Alaska Fairbanks
- Winston Salem State University
- Haskell Indian Nations University

http://nia.ecsu.edu/ureomps2011/ (252) 335-3696
Applying Common Core Standards at the K-12 Academic Levels Using LEGO Robotics
Dezerae Little (St. Aug), Derrick Jones (MVSU), Mentor - Dr. Darnell Johnson

Cobb’s Point-Culpeper Rebellion Archaeology Project
Donquel Davis (WSSU), Kevin Brodie II (NSU), Mentor - Dr. Malcolm LeCompte

Spectroscopic Image Signature Classification of Land Cover Types using Multi-Spectral Data within a Neural Network
Bernard Aldrich Jr. (JSU), Charniece Huff (Spelman), Mentor: Mr. Je’aime Powell

Analyzing Long-Term Drought Effects Using Aqua-I Satellite Data
Autumn Luke (ECSU), Andrew Brumfield (ECSU), Mentor: Mr. Eric Baptiste

Using CReSIS Radar Data to Determine Ice Thickness and Surface Elevation at Pine Island Glacier
Michael Koch (ECSU), Nyema Barmore (ECSU), Mentor: Mr. Peter Burkette

Utilizing Various Data Sets from the CReSIS Data Archives to Visualize Echogram Information at Specific Locations in Google Earth
Maya Smith (WSSU), Shaquia Johnson (MVSU), Mentor: Mr. Jeff Wood

Judy Qiu
Assistant Professor of Computer Science and Informatics

Abstract
The shift to parallel computing, including multi-core computer architectures, cloud distributed computing, and general purpose GPU programming - leads to fundamental changes in the design of software and systems. As a result, learning parallel, distributed, and cloud techniques in order to allow software to take advantage of the shift toward parallelism is of important significance. To this end, FutureGrid, an experimental test bed for cloud, grids, and high performance computing, provides a resource for anyone to find, share, and discuss modular teaching materials and computational platform supports.

This talk presents a series of case studies for experiences in parallel and distributed education using the FutureGrid test bed. Building on previous experiences from courses, workshops, and summer schools associated with FutureGrid, we present a viable solution to developing a curriculum by leveraging collaboration with organizations. Our approach to developing a successful guide stems from the idea of anyone interested in learning parallel and distributing computing can do so with minimum assistance from a domain expert, and it addresses the educational goals and objectives to help meet many challenges, which lie ahead in the discipline. We validate our approach to developing a community driven curriculum by providing use cases and their experiences with the teaching modules.