

### Qualifications and Skills:

The qualified candidate must have experience with the following:

- ESRI ArcGIS 9.x with ArcEditor and Spatial Analyst extensions
- ESRI ArcIMS 9.x (not essential, but experience desired)
- Thematic mapping of Census data
- Creation/editing of geodatabases
- SQL (must be able to perform attribute and spatial queries)
- Microsoft Access
- ArcXML, VBA/ArcObjects, HTML, JavaScript (not essential, but experience desired)

### The qualified candidate must possess the following skills:

- Self-motivated with excellent organizational and problem-solving skills
- Be able to work alone with little direction, as well as in a group setting
- Excellent written and verbal skills
- Knowledge of social media marketing (Facebook, Twitter, E-blast marketing) is a real plus.

**Education:** Bachelor's degree in GIS, geography, statistics, computer science, or other related fields with at least two years of working experience. (Master's students or graduates preferred.) Please send resume and cover letter to [kshackford@boedc.org](mailto:kshackford@boedc.org).

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# GEOSPATIAL

## NEWSLETTER

## THE GEOSPATIAL MOVEMENT AT BCC!

Welcome to the fourth edition of the Geospatial Newsletter! Geospatial Newsletter reports on all activities related to geospatial technology at BCC. Each issue covers three to four months of activities (e.g., this issue covers activities from September to December 2011). Once again, we are delighted to bring a list of events and the most recent developments in geospatial technology at BCC. All newsletters may be accessed at the Department of Chemistry and Chemical Technology website at [www.bcc.cuny.edu/chemistry/?page=SpatialTechnology](http://www.bcc.cuny.edu/chemistry/?page=SpatialTechnology).

## GEOSPATIAL

### NEWSLETTER

If you have any interesting facts and achievements related to geospatial technology or applications of geospatial technology to your specialized study area, please contact us. You may email your stories to Dr. Sunil Bhaskaran ([Sunil.Bhaskaran@bcc.cuny.edu](mailto:Sunil.Bhaskaran@bcc.cuny.edu)) with a copy to Ms. Maribel Donado ([Maribel.Donado@bcc.cuny.edu](mailto:Maribel.Donado@bcc.cuny.edu)).



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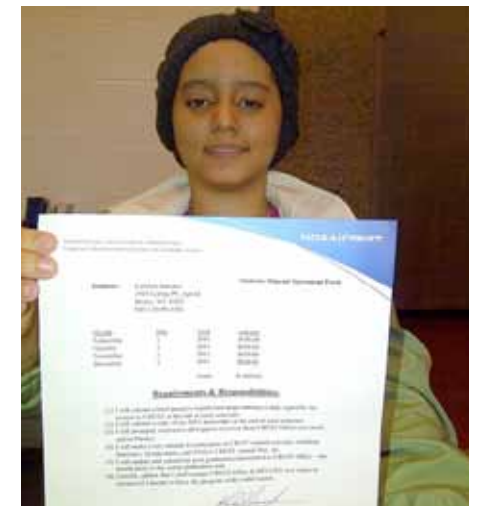


### 1. NOAA-CREST Scholarship Awarded to Karolyn Jiminez

Karolyn Jiminez has been awarded a summer scholarship from NOAA-CREST. NOAA-CREST and BCC have recently renewed their commitment for collaborative research and training in geospatial technology. Jiminez is the first female and first ever student from BCC to get this scholarship!

Jiminez received \$3,000 in summer 2011 and \$3,250 in fall 2011. She is working on a report, "Impact of Urban Development on Climate Change in New York—A Methodology Using Satellite and GIS Data-Phase I," for NOAA-CREST. This report is co-authored by Aboubaker Kaba, who is a former BCC student.

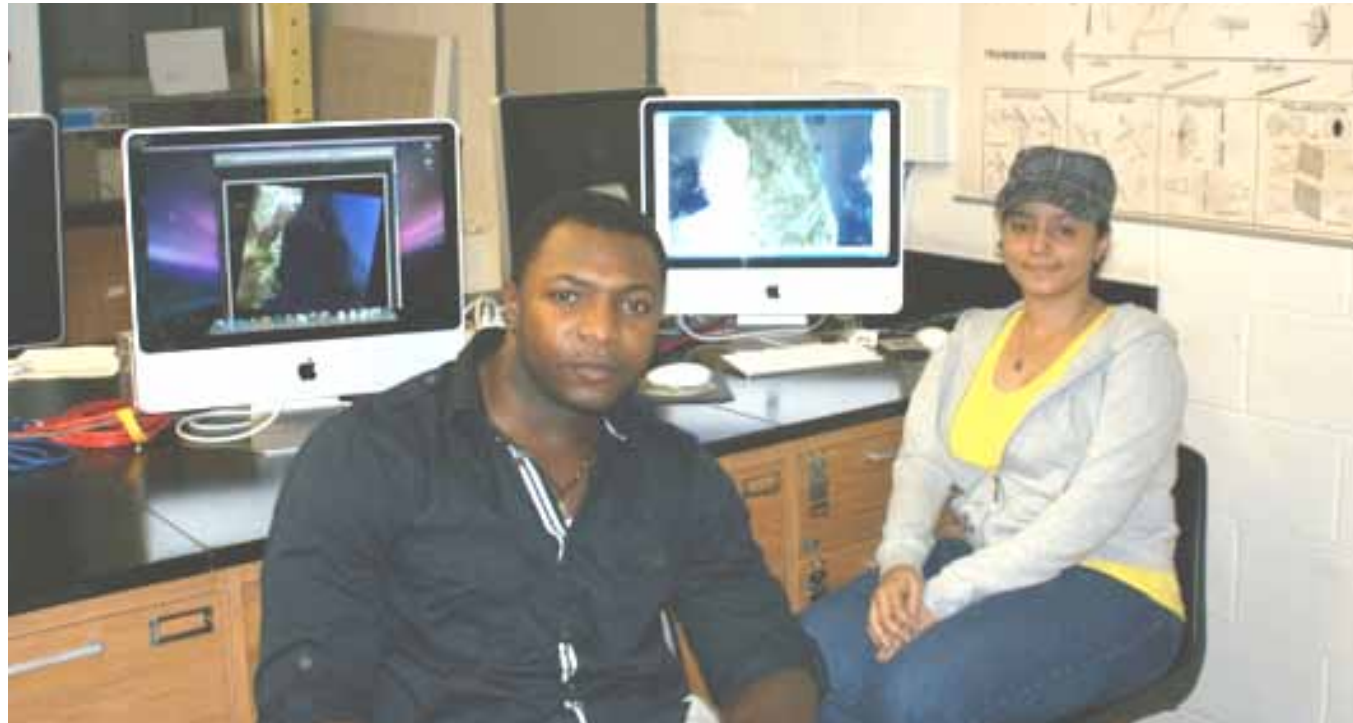
Both Jiminez and Kaba are conducting research under the guidance of Dr. Sunil Bhaskaran.



*BCC student Karolyn Jiminez proudly displays the NOAA-CREST scholarship award.*

### 2. National Science Foundation Scholarship Awarded to Aboubaker Kaba

Aboubaker Kaba, who was a student of Environmental Sciences (ENV 11), has received a summer scholarship worth \$3,000 from the National Science Foundation (NSF). Professor Neal Phillip has been instrumental in providing Kaba with the NSF grant through the NSF-Pathways grant that is jointly administered by Dean of Academic Affairs Meleties Panayiotis (York College) and Professor Phillip.



*Aboubaker Kaba and Karolyn Jiminez have been working under the supervision of Dr. Sunil Bhaskaran from the Chemistry Department on applications of satellite data for urban development and climate change in New York State.*

### 3. Aboubaker Kaba

Aboubaker Kaba, who is a former BCC student, has submitted a report, "Impact of Urban Development on Climate Change in New York—A Methodology Using Satellite and GIS Data-Phase I," to NSF and NOAA-CREST.

### 4. BCC Global Initiative Presidential Grant

Dr. Sunil Bhaskaran was awarded the BCC Global Initiative Presidential Grant Award for 2011. Bhaskaran was invited by six universities in India to deliver lectures on imaging spectroscopy. He held important discussions with heads of the departments to foster collaborative research between BCC and these universities. A detailed 150-page report on the activities conducted by Bhaskaran was presented to BCC President Carole M. Berotte Joseph; Interim Vice President of Academic Affairs Howard Wach; Chemistry Department Chair Neal Phillip; and National Center for Educational Alliances Director Barbara Schaijer-Peleg.

### 5. Dr. Bhaskaran Nominated to the BCC Global Initiative Steering Committee and Advisory Board of the Center for Teaching Excellence

Professor Neal Phillip nominated Dr. Bhaskaran to the BCC Global Initiative Steering Committee, which was approved

by Barbara Schaijer-Peleg, director of the National Center for Educational Alliances. Bhaskaran was also nominated to serve on the Advisory Board of the Center for Teaching Excellence by Professor Harriet Schenkman.

### 6. Geospatial Center at BCC

Dr. Bhaskaran submitted a proposal for a Geospatial Center at BCC to President Carole M. Berotte Joseph and Interim Vice President of Academic Affairs Howard Wach. The original proposal was presented by Bhaskaran to former Senior Vice President of Academic Affairs George Sanchez in August 2010.

### 7. Picarro Model Green House Gas Monitor Carbon Sequestration Equipment

The Chemistry Department is set to acquire the Picarro Model Green House Gas Monitor Carbon Sequestration equipment. This equipment will assist in conducting research on global warming and climate change, and provide numerous opportunities to develop geospatial research tools. The equipment purchase was made possible through a grant award to Professor Neal Phillip.

### 8. Lecture on Geospatial Technology at CTE

Dr. Sunil Bhaskaran will be delivering a lecture/seminar at the Center for Teaching Excellence at BCC on November 3, 2011. The talk will highlight the ongoing efforts in geospatial awareness at BCC and progressive work undertaken by faculty to bring the Geospatial Center at BCC into existence.

### 9. Award from ITT Visual Information Solutions Given to Dr. Bhaskaran

ITT Visual Information Solutions in Boulder, Colorado—one of the largest software companies in image analysis and solutions—has recently awarded 25 seats of image analysis software to Dr. Sunil Bhaskaran. The software will supplement the new courses that are under preparation for offering in spring 2012. Students will get a chance to use this software for the first time at BCC. The software is used by many federal agencies that conduct research in geospatial technology and applications. The provision of the software at BCC will enable students to develop research skills that may lead them to exciting career opportunities in the ever growing geospatial sector.

### 10. NASA Support to the GCBCC

The National Aeronautics and Space Administration (NASA) has committed support to the proposed Geospatial Center at BCC (GCBCC) by way of a letter from the Goddard Space Flight Center to Dr. Sunil Bhaskaran. By virtue of this commitment, they are pledging satellite data, educational materials, support in grant proposals, internships, etc., to BCC.

### 11. New Courses Proposed in Geospatial Technology

Two new courses are proposed in geospatial technology that may be run as electives in the Environmental and Earth Sciences curricula, subject to approval. These courses—Introduction to GIS and Introduction to Remote Sensing—will expose students to the growing field of geospatial technology, which is a national priority field of study in the U.S.

### 12. GCBCC Information Item Presented to BCC Senate

A detailed document describing the GCBCC was presented at the College Senate meeting on November 3, 2011.

### 13. BCC Presidential Grant Proposal 2012-2013

Dr. Bhaskaran has teamed up with Professor Vrunda Prabhu in the Math Department to submit a grant proposal. The proposal aims to improve success rates in math at BCC by using innovative methods in teaching and research. The approach focuses on using time series of satellite data to teach math.

## STUDENT ACTIVITIES & NEWS!

### Geospatial Student Projects

Ten students from the ENV 11 class are participating in different geospatial projects supervised by Dr. Bhaskaran. These students are working on projects using Census data and satellite data. The students will be trained in using GIS and image analysis software, and supervised in the completion of their respective projects. Some of them may be shortlisted to participate in the annual BCC Science Fair and other local conferences around New York.

### Publications in Geospatial Technology by Faculty

1. Javed Mallick, Atiqur Rahman, Maik Netzband and Sunil Bhaskaran (2011), Thermal Satellite Data for Assessment and Monitoring of Surface Temperature Changes and Its Impact on Micro-climate of Delhi. Urbanization and Global Environmental Change, UGEC Viewpoints, International Human Dimensions Program (IHDP) on Global Climate Change, Arizona State University, USA (Accepted).
2. Bhaskaran, S., Phillip, N., Molina, J. (2011), Rapid Assessment of a City's Solar Energy Potential Using Very High Resolution (VHR) Spaceborne Data. (Under preparation).

## EMPLOYMENT OPPORTUNITIES IN GEOSPATIAL TECHNOLOGIES

**Job Description:** The Bronx Overall Economic Development Corporation seeks a GIS specialist to perform a variety of GIS related duties to facilitate a two-year contract through NYSERDA for Green Jobs/Green New York Bronx Outreach. The qualified candidate will work closely with staff by providing maps and data analysis upon request. The job also requires the management of IT staff. Responsibilities for this role include being a liaison between IT staff and non-IT staff with regards to IT-related issues. This is a 20 hour/week, \$18/hour position with comprehensive health benefits and pro-rated annual and sick leave.

### Duties and Responsibilities:

The primary duties and responsibilities for this position include, but are not limited to:

- Provide GIS services to Green Jobs/Green New York staff including specialized maps and data analysis
- Develop and maintain geodatabases of Bronx businesses and available Bronx real estate properties
- Manage IT staff and provide IT support throughout the organization whenever possible