BGCCCI ANNUAL PLAN
Fall 2017 - Spring 2018

BGCCCI has a track record of conducting different types of activities that are relevant to the college’s strategic plan. Since 2010, seminars and workshops were delivered to faculty, students and staff across campus. New pathways courses were designed and offered in 2015, and in 2017 a new Associate in Applied Sciences (A.A.S.) degree program in Geospatial Technology was prepared and finalized for a Fall 2017 curriculum committee presentation. The center has been awarded with both external and internal grant proposals and its reputation has grown both nationally and internationally through collaborations that have resulted in peer-reviewed journal articles and publications in peer-reviewed conference proceedings. Over 100 students were trained in hands-on geospatial software applications using state-of-the-art technology, and high school students (College Now) received credits for successfully completing GIS 11 course. All the activities were aligned with the institutional strategic plan and focused on student success resulting in an increase in student enrollments and FTE for the college and University.

The following activities are planned for the next academic year.

1. **Fostering multidisciplinary projects with BCC academic departments:** Geospatial technology has multiple applications since all disciplines use geographic data in some form or another. Designing and developing multidisciplinary projects is one way to foster multidisciplinary syllabi and research which will increase the use of geospatial analyses and modeling on campus. BGCCCI has already delivered seminars and workshops at different departments but more needs to be done to increase campus visibility and potential about geospatial technology. At least four (4) specific projects will be designed in partnership and collaboration with the following departments and centers.
   a) Math and Computer Sciences department
   b) Biology and Medical Technology
   c) Chemistry and Chemical Technology
   d) Sociology
   e) Center for Sustainable Energy (CSE)
   f) College Now or CUNY Collaborative program
   g) Business and Information Systems

*Resource needs:* Large volumes of data have to be acquired, formatted, and analyzed to prepare customized hands-on exercises to deliver seminars. A dedicated **full-time geospatial analyst (HEa)** is critical to deliver this activity. A high level of communication is involved as the center increases its sphere of influence and collaborations. The center’s communication is handled by Leroy Brown (Center coordinator) for the time being. A full time **administrative assistant** is necessary to handle communications and assisting the director of the center.

*Evaluation plan:* Participants for these seminars and workshops will be recruited by working with the specific departments (Chairpersons). Detailed feedback forms (formative and summative) will be designed to collect feedback on these activities from participants.

2. **Undertaking cutting-edge undergraduate research projects with internal and external clients:** BGCCCI is already collaborating with York College, City College of New York, BMCC, and LaGuardia Community College on research projects. All these projects are characterized by a heavy involvement from undergraduate students and in the past these experiences have
helped them in learning research methodologies, building scientific temper and learning about geospatial applications. These projects are based on the analysis of satellite data and focus on global themes such as urbanization patterns, urban heat island mitigation, land cover land use model, 3-D modeling, and integrated pollution management. Currently BGCCCI is working with the NYC Mayor’s Office of Recovery and Resilience on a project that focuses on urban heat island (UHI) Mitigation. The Director of BGCCCI has been serving on the Mayor’s UHI committee since 2013. BGCCCI has been collaborating with the City of Townsville Australia on smarter cities project funded by IBM since 2013. The Director of BGCCCI Dr. Sunil Bhaskaran was invited by the Mayor of Townsville Cr. Jenny Hill and visited the City with Prof Neal Phillip (Chairperson of Chemistry Department) and Dr. Aaron Socha (former director of Center for Sustainable Energy). BGCCCI is also working on a range for projects with the Office of Research CUNY. Affiliated faculty at BGCCCI met with a team of academics, managers, students and scientists from NYU to discuss collaborations in the Urban Eyes project. Yet another project with the New School focused on Spatial Analyses of Fresh Food Access for the Elderly in the Bronx. This project started on May 19, 2017. Undergraduate students are also encouraged to participate in research funded by the student technology fee committee.

Specific projects for following academic year are

- a) Line of sight analyses for Industry Partners
- b) Network analyses for mobile ICUs for Industry Partners
- c) Spatial analyses and modeling for fresh food access for the elderly in the Bronx with New School
- d) Urban Eyes project with NYU
- e) Revitalization of Brownfields with geospatial technology with Adelphi University
- f) Smarter Cities project with School of Built Environment, University of New South Wales
- g) NSF-ATE project (2017-2020). Note this proposal is being reviewed

* Resource needs: Large volumes of data have to be acquired formatted and analyzed to prepare customized hands-on exercises to deliver seminars. A dedicated full-time geospatial analyst (HEa) is critical to deliver this activity. A high level of communication is involved as the center increases its sphere of influence and collaborations. The center’s communication is handled by Leroy Brown (Center coordinator) for the time being. A full time administrative assistant is necessary to handle communications and assisting the director of the center. This was mentioned on page 1.

* Evaluation plan: Research outputs will be presented at major conferences and symposiums. Reports will be generated from the above research and at least 2-3 manuscripts (with student co-authors) will be submitted to peer-reviewed journals and in proceedings of conferences.

3. Workshops for primary, middle and higher secondary schools: BGCCCI is focused on delivering workshops to the K-12 system that includes Title1 schools in the Bronx and NYC City. The center has already delivered several workshops to the high school students who visited from the Lehman Academy of Sciences, Upward Bound Math and Science-Program and the ‘College Now’ programs. BGCCCI will continue this partnership with ‘College Now’ and other CUNY Collaborative programs to deliver skill enhancement workshops for high school students. Discussions will be held with the College Now and CUNY Collaborative programs to deliver workshops and credit courses for high and middle school students in 2018-2019. Discussions will also be initiated with NGOs like ‘Girls Who Code’ and Women in STEM CUNY sponsored programs. The workshops are aimed at enthusing schools about geospatial technology, applications in STEM and Non-STEM disciplines and career opportunities. They will augment BCC efforts in increasing student enrollment at BCC and will support efforts for the NSF-ATE project.

* Resource needs: Large volumes of data have to be acquired formatted and analyzed to prepare customized hands-on exercises to deliver seminars. A dedicated full-time geospatial analyst (HEa) is critical to deliver this activity. A high level of communication is involved as the center increases its sphere of influence and collaborations. The center’s communication is handled by Leroy Brown (Center coordinator) for the time being. A full time administrative assistant is necessary to handle communications and assisting the director of the center.

* Evaluation plan: Detailed feedback forms (formative and summative) will be designed to collect feedback on these activities from participants.
4. **A.A.S. in Geospatial Technology**: Bronx Community College (BCC) proposes to establish an A.A.S. degree in Geospatial Technology. The 60 credits will also transfer to a B.S. in Environmental Health course at York College under an articulation agreement with York College. The goal of the program is to provide education and hands-on skills in geospatial technology. The hands-on training will be provided at the State-of-the-Art Geospatial Computing Center at BCC College that is funded by numerous grants from the Industry, Federal government and the CUNY Workforce Development Initiative (WDI). Based on reports by the Employment Training Association and Department of Labor (US DOL), the geospatial industry is growing at an exponential rate (35%) each year. This high growth sector also faces critical shortage of labor that needs to be addressed by a coordinated and national effort from Policy Makers, Industry, Universities and many others. The A.A.S. degree program will consist of 60 credits and will be a terminal degree as well as a pipeline to a 4-year BS in Environmental Health. The A.A.S proposal is currently being refined in discussion with the Office of Academic Affairs (OAA) and the BGCCCI advisory board that consists of members from the industry.

*Resource needs:* Assistance from OAA is appreciated towards connecting with the Industry and hosting meetings in addition to the annual BGCCCI advisory board.

*Evaluation plan:* The director of BGCCCI will work with the departmental and college curriculum committee, OAA for a possible Fall 2018 presentation.
The proposed A.A.S in Geospatial Technology program

60 Credits required for A.A.S. Degree

Required Core
A. English Composition
   • ENG 10 Fundamentals of composition and Rhetoric or ENG 11
     Fundamentals of Composition and Rhetoric (3 credits)
B. Mathematical and Quantitative Reasoning
   • MTH 30 Precalculus (4 Credits) or MTH 31
     Analytical Geometry and Calculus 1 (4 Credits)
C. Life and Physical Sciences
   • ENV 11 (4 Credits)

Flexible Core
A. World Cultures and Global Issues
   • HIS 10 History of the Modern World
     OR
   • HIS 11 Introduction to the Modern World (3 Credits)
   HISTORY Select ONE from HIS, GEO, PHL (0-3 Credits)
B. Individual and Society
   • COMM 11 Fundamentals of Interpersonal Communication (3 Credits)
C. Scientific World
   • GIS 11 Introduction to GIS (3 Credits)
   Additional Flexible Core Requirement – Area E.
   • GIS 12 Intro to Remote Sensing (3 Credits)

SUBTOTAL 22

Required Areas of Study
• ESE 11 Earth Systems Science –Earth (4 Credits)
• DAT 10 Computer Fundamental and Applications (3 Credits)
• MTH 31 Analytical Geometry and Calculus 1 (4 Credits) or free elective
• PHY 11 College Physics I (4 Credits)
• CHEM 11 General chemistry I (4 Credits)
• FYS 11 First Year Seminar (1 Credit)

SUBTOTAL 21

Geospatial Technology Courses
• GIS 13 Field work in geospatial technology (3 Credit)
• GIS 14 Principles of Geographic Information Systems (4 Credits)
• GIS 15 Advanced Image Analysis (4 Credits)
• GIS 16 Applied Geospatial Technology (4 Credits)
• GIS 17 Geospatial Project Management (2 Credits)

SUBTOTAL 17

1 Students in this major are required to take MTH31. MTH 30 is a prerequisite to MTH 31, so students who take MTH 30 to fulfill required core B will not have free electives. Students who have the free elective are encouraged to complete a course in Pathways Flexible B or C OR ENG 12 as well as CPR 10 or WFA 10 to complete 4 credits.
5. Expert workshops by Industry representatives: BGCCCI will plan for annual advisory board meetings, brainstorming sessions and events with the industry. These events will bring experts from the industry to BCC campus and these interactions will provide much needed exposure to BCC students. Experts from the industry have delivered several seminars in the past that were well received by students as reflected by their feedback evaluation forms and general response. Guest lectures and capstone projects will be designed with the industry and infused into existing course syllabi, which will give numerous opportunities for students to better understand of skills demanded by the industry.

* Resource needs: Large volumes of data have to be acquired formatted and analyzed to prepare customized hands-on exercises to deliver seminars. A dedicated full-time geospatial analyst (HEa) is critical to deliver this activity. A high level of communication is involved as the center increases its sphere of influence and collaborations. The center’s communication is handled by Leroy Brown (Center coordinator) for the time being. A full time administrative assistant is necessary to handle communications and assisting the director of the center.

* Evaluation plan: Participants for these seminars and workshops will be recruited by working with the specific departments (Chairpersons). Detailed feedback forms (formative and summative) will be designed to collect feedback on these activities from participants.

6. Delivering workshops for the community: The center will deliver workshops for the community and will partner with BCC’s Office of Community and Workforce Development, and Borough President’s office. BGCCCI has already delivered numerous workshops for schools and institutes including one for a delegation of teachers from a reputed school in Senegal. BGCCCI will plan to deliver 5 workshops for the community.

* Resource needs: Large volumes of data have to be acquired formatted and analyzed to prepare customized hands-on exercises to deliver seminars. A dedicated full-time geospatial analyst (HEa) is critical to deliver this activity. A high level of communication is involved as the center increases its sphere of influence and collaborations. The center’s communication is handled by Leroy Brown (Center coordinator) for the time being. A full time administrative assistant is necessary to handle communications and assisting the director of the center.

* Evaluation plan: Participants for these seminars and workshops will be recruited by working with the specific departments (Chairpersons). Detailed feedback forms (formative and summative) will be designed to collect feedback on these activities from participants.

7. Delivering customized high-end workshops to the Industry: BGCCCI will deliver high-end customized hands-on training in specialized areas such as Modeling, Spatial Analysis, image Analyses. These workshops or information sessions will be driven by industry needs to train staffers at various agencies. The creation of high end learning materials will have to be designed with input from the industry. The Director will design and create the learning materials with support from the Geospatial Analyst (requested on the attached budget sheet for the 2017-2018 fiscal year). BGCCCI will aim and work with the Office of Academic Affairs (OAA) and Workforce Development to design income generating activities.

* Resource needs: Large volumes of data have to be acquired formatted and analyzed to prepare customized hands-on exercises to deliver seminars. A dedicated full-time geospatial analyst (HEa) is critical to deliver this activity. A high level of communication is involved as the center increases its sphere of influence and collaborations. The center’s communication is handled by Leroy Brown (Center coordinator) for the time being. A full time administrative assistant is necessary to handle communications and assisting the director of the center.

* Evaluation plan: Participants for these seminars and workshops will be recruited by working with the specific departments (Chairpersons). Detailed feedback forms (specific and narrative) will be designed to collect feedback on these activities from participants.

8. Internships, Workshops and International Conferences: BGCCCI will continue to develop internships with federal and private agencies. It will use its existing contact with the NY Department of Labor, NYC Mayor’s Office of Recovery and Resilience, Langan, Environmental Systems Research Institute (ESRI), Department of Parks (DEP), NOAA-CREST to build
these internships. BGCCCI will aim to sign on at least five (5) internship agreements with federal or private agencies. Staff and affiliated faculty at BGCCCI will attend workshops and conferences to enhance their existing knowledge and learn about new developments. This exercise is necessary to keep in trend with the latest technology and applications.

* Resource needs: Assistance from OAA is appreciated towards connecting with the agencies and hosting meetings in addition to the annual BGCCCI advisory board. A high level of communication is involved as the center increases its sphere of influence and collaborations. The center’s communication is handled by Leroy Brown (Center coordinator) for the time being. A full time administrative assistant is necessary to handle communications and assisting the director of the center.

* Evaluation plan: Detailed feedback forms (formative and summative) will be designed to collect information on successful internship agreements with agencies.
9. Budget Request (Fiscal 2017-2018): BGCCCI is currently managed by the Director without any staff. The director does not receive any salary towards his contributions but has received 6hrs. of bi-annual release time to plan, design and implement a wide range of multi-faceted activities. It is very challenging to sustain and balance teaching expectations with the center activities without any staff or personnel support. A detailed budget request is included with this plan for consideration (See attached excel sheet)

10. How BGCCCI plan relates to BCC-CUNY Strategic Plans and Goals? The overarching vision of Bronx Community College is to effectively invest in each student’s success by engaging with them in an integrative and supportive environment that facilitates the development and achievement of their educational and career goals. Graduates will be prepared to understand, thrive in, and contribute to a 21st - century global community marked by diversity, change, and expanded opportunities for lifelong learning and growth. Since its inception, BGCCCI has been demonstrating that all activities conducted by it in the past were aligned with this overarching institutional plan. The proposed (2017-2018) plan is well aligned to this vision because it focuses on training and educating students in emerging technologies and designing innovative out-of-the-box internship and career pipelines. The proposed plan also addresses the Goal#5 and Goal#7 of the BCC Strategic Plan – ‘To Cultivate a 21st Century Curriculum’ and ‘To Promote a Reputation for Excellence’ by designing new courses and programs that meets workforce needs of the industry. The proposed and continuing national and international collaborations at BGCCCI, high success rates in getting external funds will further grow the center and help in creating a unique brand image within CUNY and in the region. The proposal submitted to the National Science Foundation’s Advanced Technological Education Program (being reviewed) would enable BGCCCI to grow the center to a world-class regional entity.

<table>
<thead>
<tr>
<th>Description of proposed activities</th>
<th>Alignment to BCC-CUNY strategic plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fostering multidisciplinary projects with BCC academic departments.</td>
<td>Goal #3: Deepen student learning {Promotes integrated faculty learning, Promote and encourage excellent teaching and scholarship.}</td>
</tr>
<tr>
<td>• Undertaking cutting-edge undergraduate research projects with internal and external clients.</td>
<td>Goal #3: Promote and encourage excellent teaching and scholarship.</td>
</tr>
<tr>
<td>• Workshops for primary, middle and higher secondary schools.</td>
<td>Goal #3: Deepen student learning {Promotes integrated faculty learning, Promote and encourage excellent teaching and scholarship.}</td>
</tr>
<tr>
<td>• A.A.S. in Geospatial Technology.</td>
<td>Goal #5: Cultivate a 21st Century Curriculum {strengthen program outcomes by maintaining formal linkages with four-year colleges and industry.}</td>
</tr>
<tr>
<td>• Expert workshops for BCC students.</td>
<td>Goal #5: Cultivate a 21st Century Curriculum {strengthen program outcomes by maintaining formal linkages with four-year colleges and industry.}</td>
</tr>
</tbody>
</table>
| • Delivering workshops for the community.       | Goal #7: Promote a reputation for excellence
1. Build and promote a brand around a learning-centered culture.
2. Promote pride in BCC.
3. Engage faculty, staff, students, alumni and supporters in telling their BCC success stories.
4. Illustrate BCC as a premier institution with branding messages and media sources. |
| • Internships, Workshops and International Conferences. | Goal 7: Promote a reputation for excellence
1. Build and promote a brand around a learning-centered culture.
2. Promote pride in BCC.
3. Engage faculty, staff, students, alumni and supporters in telling their BCC success stories.
4. Illustrate BCC as a premier institution with branding messages and media sources. |
BGCCCI’s
State-Of-The-Art Geospatial Computing Center

QUICK LOOK FACTS ABOUT BGCCCI

- Inaugurated and launched on the 3rd October, 2014
- Collaboration with CUNY-CREST Institute
- Founding director of the Center – Dr. Sunil Bhaskaran

Staff (1)
Leroy Brown (Coordinator – BGCCCI) Payroll title – College Assistant.

BGCCCI Office Address
807, Meister Hall, Bronx Community College, 2155, University Avenue, Bronx-NY 10453. Tel: 718-289-5233/5566. Fax: 718-289-6448

Geospatial Computing Center Location: 330, Meister Hall, Bronx Community College, 2155, University Avenue, Bronx-NY 10453. Tel: 718-289-5233/5566. Fax: 718-289-6448; Email: Sunil_director.bgcci@bcc.cuny.edu / Leroy.Brown@stu.bcc.cuny.edu
BGCCCI Events

1. TTD event

Bev Corwin of the Technology Transfer Delivery (TTD) Team will visit the Geospatial Center of the CUNY CREST Institute in the month of May, 2018. Bev is the founder of TDD. Technology Transfer Days are diverse collaborative learning events where invited speakers, guest participants, attendees, subject matter experts, thought leaders, researchers, advisors, entrepreneurs, innovators and inventors gather from industry, business, academia, research, government, and community organizations to problem solve, learn, mentor, and collaboratively explore needs and opportunities in emerging technology transfer ecosystems.

2. 25th April, 2018
Director of BGCCCI invited to talk about Urban Sensing at a seminar by New York University-Kavli Futures

26th April, 2018
Director of BGCCCI invited to sit on a panel discussion about application of remote sensing for Smarter Cities

3. Director of BGCCCI to attend the Defense and Intelligence Research Forum

4. Thirty (30) members from the The Geospatial Information Systems and Mapping Organization (GISMO) the largest not-for-profit Geospatial Association in New York State will be visiting the BCC Geospatial Center of the CUNY CREST Institute (BGCCCI) on the 20th April at 3:30pm
5. Director of BGCCCI delivers a talk on 'Managing Earth from Space' at the Wycoff Chamber of Commerce. 
   Date: 3/15/2018 Time: 8:00am

6. Director of BCC Geospatial Center invited to attend the Falling Walls Lab in New York at the German House, 871 United Nations Plaza New York, NY 10017. 
   Date: Thursday, September 14 - Time: 8:30am - 11:00am

7. Director of BCC Geospatial Center invited to deliver a talk titled: “Pioneering Activities in Geospatial Education, Research and Outreach at the BCC Geospatial Center of the CUNY CREST Institute” at the Fund for the City of New York. 
   Date: September 27 - Time: 11:30am - 1:00pm

8. BGCCCI Coordinator and GIS Instructor represent BGCCCI at the Opportunity Fair hosted by the Fannie Lou Hammer School in the Bronx. 
   Date: October 7th - December 9th, 2017
9. GISMO cordially invited students to participate in the Job Fair, which was held at Hunter College (695 Park Avenue).

Date: October 24, 2017 - Time: 2:00pm - 6:00pm

10. BCC Geospatial Center Director and Principal Investigator of NSF-ATE program to participate in the 2017 ATE Principal Investigators Conference at Washington, D.C.

Date: October 23-25, 2017
11. BCC Geospatial Center discusses new pipelines with BMCC's Criminal Justice Program  
   Date: October 27, 2017 - Time: 11:00am

12. Geography & Spatial Thinking Across the Curriculum (GeoSTAC).  
   Date: Fri, October 27, 2017 - Time: 1:00 PM – 5:00 PM - Location: Room S341 (Main Campus), BMCC, CUNY

13. Director of BGCCCI invited to present at the International Research and Education Forum  
   Date: November 8, 2017 - Location: The City University of New York (CUNY) Graduate Center, 365 Fifth Avenue at 34th Street, New York City.
BGCCCI Workshops

Spring 2018

The workshops provided selected participants with an opportunity to learn about Geospatial Technology and its applications. Carefully designed sessions gave them an opportunity to learn about spatial technology and get hands-on training at the Geospatial Computing Center. Interactions with experts from the Industry informed them about exciting courses and careers in geospatial industry. The workshop was designed to enthuse the participants about spatial concepts, spatial thinking and the world of Geospatial Technology. It provided a rare opportunity for school students to learn and earn a handsome stipend. Participants presented a project at the end of the workshop.

Middle School Workshop

High School Workshop

Fall 2017

The workshops provided selected participants with an opportunity to learn about Geospatial Technology and its applications. Carefully designed sessions gave them an opportunity to learn about spatial technology and get hands-on training at the Geospatial Computing Center. Interactions with experts from the Industry informed them about exciting courses and careers in geospatial industry. The workshop was designed to enthuse the participants about spatial concepts, spatial thinking and the world of Geospatial Technology. It provided a rare opportunity for school students to learn and earn a handsome stipend. Participants presented a project at the end of the workshop.
Middle School Workshop

Geospatial Technology Workshop for Middle School Students with stipends* [Funded by the National Science Foundation]

*Stipends are only awarded to participants who attend all the (10) workshops and successfully complete all assignments.

When: Every Saturday from 7th October to 9th December 2017, 9:00am-12:00pm
Where: Geospatial Computing Center, 330, Meister Hall, Bronx Community College, 2155, University Ave, Bronx, New York-10453

For Additional Information Please Contact
Dr. Sunil Bhaskaran [Director of BCC Geospatial Center]
Email: Sunil.Bhaskaran@bcc.cuny.edu; Tel: 718.289.5566/5523; Fax: 718-289-6448.
Geospatial Center Website: http://www.bcc.cuny.edu/geospatial/

High School Workshop

Mapping Air Quality in New York City
Geospatial Technology Workshop for High School Students with stipends* [Funded by the National Science Foundation]

*Stipends are only awarded to participants who attend all the (10) workshops and successfully complete all assignments.

When: Every Saturday from Oct 7, 2017-Dec 9, 2017 from 1:00pm-4:00pm.
Where: Geospatial Computing Center, Meister Hall 330
Bronx Community College, 2155 University Ave, Bronx, New York-10453

For Additional information contact - Dr. Sunil Bhaskaran
[Director of BCC Geospatial Center]
Email: Sunil.Bhaskaran@bcc.cuny.edu

Inquiries by phone may be made by phone to 718-289-5233.
BCC Geospatial Center of the CUNY CREST www.bcc.cuny.edu/geospatial

Inauguration and Training High School Workshop in Geospatial Technology at the BCC Geospatial Center; NSF-ATE sponsored Workshops (DOCT-20Dec)

Sowing the Geospatial Seeds Geospatial Workshops for Middle School of the BCC Geospatial Center; NSF-ATE FALL 7Oct-2Dec, 2017
Invited lectures, seminars and honors

1. Invited speaker – International Research Conference – Graduate Center – CUNY, 8th November, 2017
2. Invited to speak at the GeoStac (Geospatial Seminar), BMCC-CUNY, 10/27/2017, 1-5pm
3. Invited to attend the Falling Walls Lab New York, Thursday, September 14, 8:30am - 11:00am at the German House, 871 United Nations Plaza, New York, NY 10017.
4. Invited on the 2nd August, 2017 by CUNY to serve as a member of a university wide implementation team for ‘Knowledge creation and Innovative Research’ – one of the 5 major areas of the Connected CUNY Strategy Framework http://www1.cuny.edu/sites/connected/overview/ led by Chancellor James B. Milliken, Provost Vita Rabinowitz and Associate Vice Chancellor Amy McIntosh.
5. Invited to attend the ENVI Analytics Symposium (EAS) 22-24 August, Denver.

BGCCCI Collaboration

1. Collaboration with New School and BCC Geospatial (AGG), New Orleans

   Description of program:

   Urban health refers to not only disease burdens and the related disparities in urban areas, but also health services and access to such, health behaviour and lifestyle, and the impact of health policies and practices in urban areas. Geospatial technologies include both the traditional Geographic Information System (GIS) and Remote Sensing (RS) technologies, and more importantly, the recent development in GPS and tracking/locational technologies, location-enabled online services and social media, volunteered geographic Information (VGI), and portable sensors, as well as the advances of such technologies in urban health applications with support from big data and cloud computing. Sample topics include:

   - Monitoring urban environment exposure and health effects by incorporating geolocated sensors
   - Modeling spatial and space-time accessibility to health services & food outlets in urban environment (incl. activity spaces)
   - Impact of the environment on physical activity and lifestyles in urban areas measured through geospatial technologies (e.g. walkability, …)
   - Use of social media (e.g twitter, foursquare) to understand patterns of utilization of public facilities (e.g. parks)
   - Impact of location-based augmented reality games (e.g. Pokemon go) in urban environment on individual health.

2. Harris Corporation collaborates with the BCC Geospatial Center

   Harris Corporation will provide the Environment for Visualization Images - Interactive Data Language (ENVI+IDL) software and extensions at a subsidized rate to support the new GIS 12 Online course - Introduction to Remote Sensing. The 3 credit 4hr. course will be offered for the first time at Bronx Community College and the City University of New York. The --book will be provided by Kendall Hunt Publishers. The author of the book is the Director of BGCCCI Professor Sunil Bhaskaran
Grants and Funding

(2017) Training BCC students and faculty in 3D Geographic Information System Data Analysis and Modeling (Status - funded $16,000).

(2017) Teaching Early Childhood Students about Geospatial Faculty Mentor: Sunil Bhaskaran (Status – Funded $2,500)