The Geospatial Analytics Program at NC State University is implementing a major expansion in our research and graduate instruction program.   As part of the University wide Chancellor’s Faculty Excellence Program (<http://workthatmatters.ncsu.edu/>) we are recruiting for 3 new positions in any combination of advanced remote sensing, geospatial analytics, and geospatial digital visualization.  These flexible rank tenure track slots will be attached to the University Center for Earth Observation and will join the 25 member interdisciplinary graduate faculty in Geospatial Information Sciences (<http://gis.ncsu.edu/>).

Review of applications will begin in the second week of March 2013 and the interview process for the College of Natural Resources senior position will begin at the end of March.  Applications for the other 2 positions will begin the review process at the end of March with a planned interview schedule in mid to late April.

**College of Natural Resources**

**Center for Earth Observation**

Full Professor – Geospatial Analytics Faculty Excellence Position

NC State University is seeking a senior faculty member to co-lead its Center for Earth Observation (CEO) which houses the geospatial analytics research and teaching program. The position is designed for a full professor who will head research teams focused on advanced remote sensing and geospatial modeling science, develop and teach graduate courses in advanced spatial analysis and remote sensing, co-lead the planning and implementation of a new graduate MS/Phd in geospatial analytics, assist with the recruitment of two new assistant/associate professor geospatial faculty, and co-direct the new geospatial visualization research facility.

This position is our initial hire in the University’s geospatial analytics initiative which in turn is part of the Chancellor’s Faculty Excellence Program initiated in Spring 2012 (<http://www.ncsu.edu/faculty-and-staff/workthatmatters/>).

The successful candidate will have a demonstrated record of securing significant external funding and extensive publications in high quality geospatial scholarly journals, an outstanding record of developing and leading teams of scientists and students including recruiting, mentoring, and placing outstanding graduate students and post-docs and a successful history of developing and expanding collaborative research initiatives with internal and external partners that grow the domain of the University’s geospatial science and program. The position will have an interdisciplinary tenure home in the College of Natural Resources’ Department of Forestry and Environmental Resources and will have an anticipated time distribution of 50% research, 25% teaching and mentoring, and 25% program leadership.

The current CEO research program has active initiatives in: 1) environmental science informatics, including forest health, eastern wildfire, hydrology, vegetation monitoring, coastal ecology and engineering, and climate modeling, 2) open source GIS modeling, 3) visualization of human/environment interactions related natural resources including health and wellness (e.g., public health benefits associated with parks, food safety incident management, relationships between urban green space and healthy communities, etc.), and 4) advanced geospatial sciences involving 3D visualization, tangible GIS models, and enterprise web enabled GIS applied to state and federal public land management agencies including a large program with the National Park Service. In addition, the Center and the University have emerging programs in geospatial Intelligence focused on advanced analytical sciences and in civilian applications of unmanned aircraft platforms.

In addition to the extensive university resources in advanced analytics and computer sciences, CEO geospatial facilities include an outstanding new visualization laboratory, a newly renovated additional 1,500 square foot office suite, and a just refurbished 1,800 square foot experimental classroom. This is in addition to housing the current 8 full time geospatial faculty, 6 full time staff, and 25+ graduate students.

Founded in 1887, North Carolina State University is a land-grant institution distinguished by its exceptional quality of research, teaching, extension, and public service. Located in Raleigh, North Carolina, NC State is the largest university in the state, with more than 34,000 students and 8,000 faculty and staff. National rankings consistently rate Raleigh and its surrounding region among the five best places in the country to live and work, with a highly educated workforce, moderate weather, reasonable cost of living, and a welcoming environment. A collaborative, supportive environment for business and innovation and research collaborations with area universities and the Research Triangle Park are compelling reasons for relocation to the area.

The position and application procedures are described in detail at:

<https://jobs.ncsu.edu/postings/16360> ,

and inquiries can be addressed to: Dr. Hugh Devine, Chair

Graduate GIS Faculty

Hugh\_Devine@ncsu.edu

919-515-3682

**NC State Department of Computer Science**

Associate/Assistant Professor – Geospatial Analytics Faculty Excellence Position

NC State University’s Computer Science department will hire a new faculty member to help create its new Geospatial Analytics research and teaching program. A successful candidate will lead a computer science research group focused on spatial computing including location-aware mobile computing, spatial interaction and visualization, and geospatial algorithms and data mining; develop and teach graduate courses on related topics; collaborate extensively with other faculty in the Geospatial program, and assist with the planning and implementation of a new graduate MS/Phd in geospatial analytics.

This position is one of three hires in Geospatial Analytics initiative, which in turn is part of the Chancellor’s Faculty Excellence Program initiated in Spring 2012 (http://www.ncsu.edu/faculty-and-staff/workthatmatters/). The very successful geospatial science graduate research program (gis.ncsu.edu) is expanding to address both basic geo-research needs and corresponding programs in spatial computation and mathematical modeling. This expansion will focus on remote sensing and “big data” issues and will be linked to parallel Faculty Excellence programs in Data Driven Science, Forensics Sciences, and Global Environmental Change as well as NC State’s unique Institute for Advanced Analytics (analytics.ncsu.edu).

The position duties include: 1) leading a vigorous spatial computing research group, which will require strong evidence scholarly impact, such as publications in quality journals and securing significant external funding; 2) mentoring outstanding graduate students and post-docs; and 3) developing and expanding collaborative research initiatives with internal and external partners that grow the domain of the university geospatial science and program.

The NCSU Computer Science Department is one of the largest and oldest in the country. It is part of NCSU’s College of Engineering, which has recently received significant increases in private and public funding, faculty positions, and facilities that will assist the Department in achieving its goals. The department’s research expenditures and recognition are growing steadily. For example, we have one of the largest concentrations in the country of prestigious NSF Early Career Award winners (total of 21). Founded in 1887, North Carolina State University is a land-grant institution distinguished by its exceptional quality of research, teaching, extension, and public service. Located in Raleigh, North Carolina, NC State is the largest university in the state, with more than 34,000 students and 8,000 faculty and staff. National rankings consistently rate Raleigh and its surrounding region among the five best places in the country to live and work, with a highly educated workforce, moderate weather, reasonable cost of living, and a welcoming environment. A collaborative, supportive environment for business and innovation and research collaborations with area universities and the Research Triangle Park are compelling reasons for relocation to the area. Our faculty regularly engage in teaching and research activities with the vibrant North Carolina games industry, including over 40 games companies ranging from industry leaders like Electronic Arts, Epic Games and Ubisoft to serious games studios like Lockheed Martin’s Virtual Worlds Lab and Virtual Heroes, Inc.

In addition, the hired candidate will have the opportunity to participate in a new geospatial research team with the two other Geospatial Analytics hires, as well as to collaborate with other the other 30+ new Chancellor’s Faculty currently being recruited. This is in addition to the 25+ current GIS faculty that are spread among 15 of the University’s colleges and departments. The position will be supported by not only lab space in computer science, but also the Center for Earth Observation’s entirely new 2,000 square foot geo-visualization laboratory and newly renovated 1,800 square foot experimental teaching facility. The Center research program has active initiatives in climate modeling, 3D visualization, tangible modeling and geospatial intelligence.

Applications will be reviewed as they are received. The positions will remain open until suitable candidates are identified. Interested candidates can obtain information about the position online at <https://jobs.ncsu.edu/hr/postings/20163>. Applicants should submit the following materials; cover letter, curriculum vitae, research statement, teaching statement, and names and complete contact information of four references, including email addresses and phone numbers. Additional information about the Department of Computer Science and its research programs may be found at http://www.csc.ncsu.edu/. Inquiries should be sent to ga-cluster-search@csc.ncsu.edu

North Carolina State University is an equal opportunity and affirmative action employer. In addition, NC State University welcomes all persons without regard to sexual orientation. Individuals with disabilities desiring accommodations in the application process should contact the Department of Computer Science at (919) 515-2858.

**Department of Marine Earth and Atmospheric Sciences**

Assistant/Associate Professor – Geospatial Analytics Faculty Excellence Position

NC State University invites applications for a tenure track faculty position at the assistant or associate professor level for a new Geospatial Analytics research and education program. The successful candidate will lead research focused on advanced remote sensing and geospatial analytics of the Earth’s surface or shallow sub-surface, develop and teach related upper undergraduate and graduate courses, and assist with the implementation of a new graduate MS/PhD degree program in Geospatial Analytics. It is anticipated that the position will be with the Department of Marine Earth and Atmospheric Sciences (MEAS), one of the largest interdisciplinary geoscience departments in the nation ([www.meas.ncsu.edu](http://www.meas.ncsu.edu)). The multi-disciplinary nature of the department lends itself to the study of severe weather and its impacts, coastal processes and ecosystems, land surface evolution, water quality and climate change.

This position is one of three hires in our Geospatial Analytics initiative supported by the Chancellor’s Faculty Excellence Program ([http://www.ncsu.edu/faculty-and-staff/workthatmatters](http://www.ncsu.edu/faculty-and-staff/workthatmatters/)). This effort will expand the very successful geospatial science research and teaching program ([gis.ncsu.edu](file:///C%3A%5CUsers%5Cnhughd%5CDownloads%5Cgis.ncsu.edu)) to include more focused investigations into “big data “issues , 3D remote sensing, and complex spatio-temporal modeling. The geospatial initiative will be directly linked to the parallel Faculty Excellence programs in Data Driven Science, Forensics Sciences, Bioinformatics, and Global Environmental Change as well as to NC State’s unique Institute for Advanced Analytics ([analytics.ncsu.edu](http://analytics.ncsu.edu/?page_id=1799)).

The geospatial research program is coordinated by the Center for Earth Observation (CEO) which currently supports 20+ PhD and MS students in allied disciplines (e.g., Natural Resources, Marine, Earth and Atmospheric Sciences, Forestry and Environmental Resources, etc.). CEO has active research initiatives in: 1) environmental science informatics, including forest health, eastern wildfire, hydrology, vegetation monitoring, coastal ecology and engineering, and climate modeling, 2) open source GIS modeling, 3) visualization of human/environment interactions related to natural resources including health and wellness , 4) advanced geospatial sciences involving 3D visualization, tangible GIS models, and web GIS applied public land management agencies.

The current GIST academic program includes: 1) a well-enrolled (100+) professional master’s degree in Geospatial Information Science and Technology, 2) a correspondingly large graduate certificate program in Geospatial Information Systems, 3) a graduate minor in Geospatial Information Science, and 4) a graduate minor in Remote Sensing.

Research and teaching in the Department of Marine, Earth and Atmospheric Sciences address some of the most complex and important geoscience issues facing North Carolina and the world, including hurricanes, floods, climate change, water and air pollution, coastal erosion, the sustainability of fisheries, environmental cycles of critical elements (e.g., carbon and nitrogen), and the history of life itself.

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**Job duties**

The position duties include:

1. establishing an externally-funded cutting edge research program with an emphasis on new technologies in remote sensing and RS data analytics (for example, lidar mapping, hyperspectral imaging, sensors mounted on UAV’s);
2. teaching upper undergraduate and graduate Remote Sensing and GIST courses and mentoring MEAS and GIST graduate students;
3. developing and expanding collaborative research initiatives with internal and external partners that grow the domain of the University’s Geospatial Analytics program and contribute to the mission of the MEAS department.

The anticipated time distribution among these duties is 45% research, 45% teaching and mentoring, and 10% service.

**Minimum education/experience**

A PhD in geospatial sciences, geomatics, geodesy, or a related field.

**Departmental required skills:**

Commitment to teaching excellence and an active research agenda with an established publication record.

**Preferred experience, skills, training/education:**

* Experience with modern 3D remote sensing technologies, such as lidar, IFSARE/InSAR, GPS Geodesy, 3D photogrammetry**;**
* Background in geospatial intelligence or hyperspectral imaging;
* Familiarity with development or applications of open source geospatial software;
* Experience with UAV and robotic mapping technologies.

The position and application procedures are described in detail at <https://jobs.ncsu.edu/postings/19853> .

Inquiries can be addressed to: Dr Helena Mitasova

Marine, Earth and Atmospheric Sciences

Assoc Professor

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NCSU Campus

Raleigh, NC 27695

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