



DEPARTMENT OF GEOGRAPHICAL SCIENCES

AT THE UNIVERSITY OF MARYLAND, COLLEGE PARK

GIS/REMOTE SENSING PROGRAMMER FACULTY SPECIALIST/POSTDOCTORAL RESEARCHER Department of Geographical Sciences University of Maryland

The Department of Geographical Sciences at University of Maryland, College Park is seeking a highly self-motivated Professional Track Faculty Specialist/Postdoctoral Researcher (non-tenure position) to support the development of innovative algorithms for wetland characterization and change monitoring using historical and contemporary optical and synthetic aperture radar images acquired from satellite and airborne platforms. The primary objective of this position is to support wetland conservation through development of software applications that implement the algorithms referenced above for operational or semi-operational uses. Therefore, high proficiency in scientific programming for geospatial data manipulation and analysis is a key requirement for this position. Demonstrated capabilities using Python or similar programming languages (R, C/C++, etc.) in the following areas are required:

- Remote sensing: machine learning, time series/trend analysis, image segmentation
- GIS: application development for vector data processing and analysis
- Integrated raster-vector data visualization and analysis
- Graphical user interface development
- Application development using ARCGIS or similar GIS/remote sensing packages (e.g., QGIS)

Applicants should have a strong working knowledge of terrestrial and aquatic ecosystem remote sensing. Technical expertise in synthetic aperture radar remote sensing and topographic modeling using DEMs, and ability to process very large datasets using cloud computing are highly desirable. Applicants should be highly self-motivated, capable of both independent research and working with a dynamic research team.

The incumbent will be a core member of an interdisciplinary team consisting of scientists from both within and outside the university. One or more travels to Alaska and/or CONUS to meet with stake holders and/or conduct field work will be required.

Following university policies, a candidate with a master's degree will be hired as a Faculty Specialist, whereas a candidate with a PhD degree will be hired as a Postdoctoral Researcher. Salary and benefits are highly competitive. The researcher will be located at the University of Maryland at College Park. Limited travel in support of field cal/val campaigns may also be required.

Minimum Qualifications and Required Skills

An earned master's or doctoral degree in geographical sciences or a related field is generally required. However, candidates who have a bachelor's degree with several years of experience and exceptional qualifications, as well as those with a degree in other related fields (for example, Physics, Computer Science, and Electrical Engineering) with demonstrated knowledge and understanding of remote sensing of the land surface, will also be considered.

Applications should include a personal statement of background and experience relevant to the position, a signed, dated Resume/Curriculum Vitae, and names and addresses (including e-mail) of 3 references. For consideration at the postdoctoral researcher level, reprints (or accessible download urls) of selected peer-reviewed publications are required.

For best consideration applications should be submitted no later than May 18, 2019, but the search will continue until a suitable candidate is appointed.

To Apply go to: <https://ejobs.umd.edu/postings/69400> . Applications from women and minorities are particularly sought. The University of Maryland **is an Equal Opportunity Affirmative Action Employer.**

Further information on departmental research programs may be obtained from the address above and can be found at <http://www.geog.umd.edu>.