Position Summary:

There is an opening for a PhD position in the group of Dr. Vargas in the Department of Plant and Soil Sciences at the University of Delaware. The PhD will be funded as a graduate research assistantship (GRA) and is part of a funded NSF project. The student will work closely with a team of computer scientists led by Dr. Michela Taufer at the University of Tennessee to develop and apply software tools to study soil moisture at different spatial scales.

This project will connect multi-disciplinary advances across the scientific community (such as generating datasets at scale and supporting cloud-based cyberinfrastructures) to develop a data-driven software ecosystem for analyzing, visualizing, and extracting knowledge from the growing data collections (from fine-grained, in situ soil sensor information to coarse-grained, global satellite measurements). The candidate will be able to develop skills to work in collaboration with computer scientists and different stakeholders interested in soil moisture for forestry and agricultural applications.

Required Qualifications:

- Strong critical thinking and analytical skills
- Strong foundation in environmental science, soil science, remote sensing, or related discipline.
- Experience with computer code to analyze and visualize large datasets

Preferred Qualifications:

- Proficiency in commonly used computer languages, such as R, Matlab or Python
- Experience with machine learning or artificial intelligence approaches

To apply:

Please send the following information to Prof. Rodrigo Vargas (rvargas@udel.edu):

- CV
- Brief statement of research interests pertaining to the project
- At least 2 references with email addresses

The University of Delaware is an Equal Opportunity Employer which encourages applications from Minority Group Members, Women, Individuals with Disabilities and Veterans. The University’s Notice of Non-Discrimination can be found at http://www.udel.edu/aboutus/legalnotices.html

The University of Delaware (www.udel.edu) is one of the oldest land-grant institutions in the nation, one of 19 sea-grant institutions, and one of only 13 space-grant institutions. UD is designated as a high research activity university (Carnegie rated) and ranks among the top 100 universities in federal R&D support for science and engineering. Additionally, UD is in Newark, Delaware, within 2 hours of New York, Philadelphia, Baltimore, and Washington, D.C.