

From: Jonathan Greenberg
Subject: Masters/PhD in Landscape Ecology and Remote Sensing

Dr. Jonathan Greenberg and the Global Environmental Analysis and Remote Sensing (GEARS) Laboratory at the University of Nevada, Reno are now inviting applications for Doctoral or Masters work that will start in Fall 2017 for students interested in the following topics:

Landscape Level Plant-Climate Interactions: Students should be interested in applying remote sensing, GIS, and modeling to the following questions at local to global scales:

- How do plants respond to their climate at regional to global scales?
- What will be the future state of vegetated ecosystems under climate change?
- How do non-climate factors such as natural and anthropogenic disturbance impact the past, present, and future distribution of plants?

A degree or background in biogeography, environmental science, ecology, and/or biology is encouraged for applicants, as well as previous experience in remote sensing and GIS and/or ecosystem modeling.

Remote Sensing Science: Students should be interested in developing advanced remote sensing algorithms, particularly those that leverage high performance computing and machine learning algorithms. GEARS is interested in the following general topics:

- Computer vision techniques applied to high spatial resolution LiDAR and optical remote sensing imagery
- Change detection and time series analysis of multitemporal remote sensing image datasets, particularly as it applies to multitemporal LiDAR, hyperspatial optical, and "hypertemporal" datasets such as Landsat and MODIS.

Previous programming experience and a background in remote sensing and GIS is highly recommended.

Prospective graduate students will be expected to develop their own research goals, and should have curiosity, motivation, and independence. Prospective students should email a short summary of their research interests as well as a CV to Dr. Greenberg jgreenberg@unr.edu before applying to the program. Funding will be available from a variety of sources, including fellowships, research assistantships, and teaching assistantships.

Prospective PhD students should apply to the Ecology, Evolution and Conservation Biology graduate program (<http://www.unr.edu/eecb>) and prospective Masters students should apply to the Natural Resources and Environmental Science program (<https://www.unr.edu/nres>).