Position Announcement
Postdoctoral Research Associate – Lidar Remote Sensing
Department of Ecosystem Science and Management
Texas A&M University

Position title: Postdoctoral Research Associate

Summary:
The employee will provide remote sensing expertise and conduct research in lidar remote sensing from advanced terrestrial, airborne, and satellite remote sensing platforms, including UASs (Unmanned Aerial Systems), to quantify ecosystems biophysical parameters and monitor vegetation condition. Agency partners in this effort are Texas A&M University’s (TAMU’s) Department of Ecosystem Science and Management (ESSM); Texas A&M AgriLife Research; the Texas Engineering Experiment Station (TEES) Center for Autonomous Vehicles and Sensor Systems (CANVASS); and the TAMU Center for Geospatial Sciences, Applications and Technology (GeoSAT). The position will be funded for at least one year, starting immediately. The position is located in the Department of Ecosystem Science and Management (http://essm.tamu.edu/) at Texas A&M University working with Dr. Sorin Popescu (http://essm.tamu.edu/people/faculty/popescu-sorin/).

Duties
1. Assist with the development of innovative image- and lidar-analysis, including discrete-return, waveform, and photon counting lidar technologies, and provide data needs to collaborating scientists.
2. Provide leadership and participation in remote-sensing image collection with a UAS (octocopter, FAA COA applied for).
3. Provide leadership and participation in development and execution of protocols for consistent image-analysis products for repetitive scientific needs (e.g., geographic registration, spectral correction, image mosaicking, production of NDVI images, derivation of point clouds using Structure-from-motion techniques and lidar).
4. Assist lead PI with research projects as needed, with the supervision of graduate and undergraduate students, and with related duties as assigned.
5. Assist with field data collection when necessary.
6. Assist with teaching activities as needed.
7. Write research reports, manuscripts, and present results at scientific meetings.
Requirements:
Education - A Ph.D. degree in Ecosystems Science, Forestry, Geosciences, or closely related field.

Experience
Demonstrated experience in research projects, extensive knowledge of image-processing software packages and lidar remote sensing, with applications in vegetated ecosystem studies. Experience in remote-sensing software and hardware including UAS and sensors is desirable. Significant programming experience in R and/or IDL or other languages and statistical analysis, including spatial statistics is highly desirable.

Knowledge, Abilities and Skills
Excellent written and oral communication skills, proficiency in remote and proximal sensing for agricultural applications, and willingness to work in laboratory research and agricultural field-research operations are required. Ability to write well-structured computer programs. Ability to design, build, and test electronic circuits.

Applications
Candidates should be available to start as early as possible. Interested individuals should send a cover letter, curriculum vitae, and university transcripts to Dr. Sorin Popescu. Applications will be submitted through the Texas A&M Greatjobs.tamu.edu site.