Research Associate position in Forest Biometrics/Measurements

The Forest Biometrics and Measurements Lab at Oregon State University seeks a highly motivated and talented research associate with a background in forest biometrics or geospatial analysis to examine the efficiency and suitability of selected methods to predict live and dead basal area, above-ground biomass, and canopy bulk density from airborne lidar, other remote sensing, and ground data. The position provides a competitive 12-month stipend and health insurance for two years (subject to performance), starting November 1, 2017.

The project is part of a collaborative study with Drs. Martin Ritchie at the USFS Pacific Northwest research station (mritchie@fs.fed.us) and Andy Hudak at the Rocky Mountain Research Station (ahudak@fs.fed.us). The development of spatially-explicit information describing forest biomass and canopy and surface fuel loads over a region is critical for a broad range of applications, including policy development, forest fuels mitigation, and inventory. In keeping with the importance of spatially-explicit information and quantifying growth of young plantation, the incumbent will:

1) Examine the use of the UAV phodar to predict growth of young plantation located at Blacks Mountain Experimental Forest
2) Conduct sensitivity analysis on temporal airborne lidar datasets
3) Examine a combination of imputation and model-assisted or model-based methods to improve regional biomass and fuel load mapping
4) Process three-dimensional data, analyze, and interpret results to support improved inputs to physics-based fire and smoke models.

Oregon State University is located in Corvallis Oregon between Portland and Eugene. Ocean beaches, lakes, rivers, forests, high deserts, and the Coast and rugged Cascade Ranges are within a 100-mile drive of Corvallis. For information about the College of Forestry at OSU, visit http://www.cof.orst.edu/

Candidates must possess a PhD degree in Forest Biometrics/Measurements or Geospatial Analysis. Expertise in forest measurement or a quantitative field involving geospatial analysis is expected. The successful candidate will have knowledge of three-dimensional point cloud data analysis and synthesis, mapping, and imputation, as well as proficiency in scripting (e.g. python, C/C++) and data analysis (e.g. R). Excellent written and verbal communication skills required. Proficiency in database language (e.g., SQL, Access) is preferred, as is proficiency in imputation and mapping methods. Interested candidates should send their application, curriculum vitae including a list of publications and two letters of recommendation to:

Dr. Temesgen Hailemariam
Department of Forest Engineering, Resources, and Management
Oregon State University, 280 Peavy Hall, Corvallis Oregon,
E-mail: hailemariam.temesgen@oregonstate.edu
http://ferm.forestry.oregonstate.edu/facstaff/temesgen-hailemariam

Closing date: Nov. 15, 2017 or until the position is filled.