

PhD opportunity in data science, Bayesian statistics, and decision support tools applied to Ecology at the Univ. of Florida

Dr. Denis Valle (School of Forest, Fisheries, and Geomatics Sciences [SFFGS], University of Florida [UF]), is seeking a PhD graduate research assistant with strong interest in statistical modeling applications and decision support tools.

Research in Dr. Valle's group currently focuses on tackling important applied problems in global change biology (e.g., land-use/land-cover change), conservation, and ecology, by creating and applying innovative Bayesian statistical models and decision support tools. Dr. Valle is affiliated with the Tropical Conservation and Development program (<http://www.tcd.ufl.edu/>) at UF. Examples of past research projects can be found at <http://denisvalle.weebly.com> under the "publications" tab.

Given the wide range of problems tackled by this group, there is considerable flexibility regarding the specific scientific application. However, we are particularly interested in

- 1) Tropical and subtropical ecosystems in Latin America; and
- 2) using novel methodology to better extract information from emerging remote sensing data (e.g., LIDAR, satellite imagery, camera trap data, accelerometer and GPS data)

Applicants are expected to be highly motivated, independent, able to successfully communicate research results (i.e., through publications), and enthusiastic about computational and Bayesian methods. Prospective students with strong experience in computer programming (e.g., R, Python, or MatLab) and with great communication skills (verbal and written) are particularly encouraged to apply. The candidate must meet the formal admission requirements for the University of Florida and the SFFGS (<https://ffgs.ifas.ufl.edu/academics/apply/>)

This position will be located at the UF campus in Gainesville, FL. Duties include writing and presenting results of research in scientific conferences, searching and applying for additional sources of funding, and assisting other students within the team on statistical analyses. If interested, please email the items listed below to drvalle@ufl.edu:

- CV with contact information and contact information for three academic references
- GRE scores
- One page cover letter describing
 - a) prior research experience (if any),
 - b) career goals and interests and how they align with those from the Valle lab, and
 - c) prior experience with statistical modelling, computer programming, and/or decision support tools.

Start Date: August/2021

Information about the University of Florida: The University of Florida (<http://www.ufl.edu>) is among the top 10 U.S. public universities, according to the 2018 U.S. News & World Report rankings. UF is a Land-Grant, Sea- Grant, and Space-Grant institution, encompassing virtually all academic and professional disciplines, with an enrollment of more than 50,000 students.

The University of Florida is an equal employment and affirmative action employer and a provider of ADA services. All qualified applicants will receive consideration for employment without regard to age, ethnicity, color, race, religion, sex, sexual orientation or identity, national origin, disability status or protected veteran status.

Information about the City of Gainesville: Situated in the rolling countryside of north central Florida, Gainesville is much more than a stereotypical college town. Home of the University of Florida, seat of Alachua County's government and the region's commercial hub, it is progressive, environmentally conscious and culturally diverse. The presence of many students and faculty from abroad among its 99,000-plus population adds a strong cross-cultural flavor to its historic small-town Southern roots. Its natural environment, temperate climate and civic amenities make Gainesville a beautiful, pleasant and interesting place in which to learn and to live. Gainesville has been ranked as one of the best cities to live in the United States.

Florida boasts a diversity of fauna and flora common to both southern temperate and subtropical climates and is replete with springs, rivers, backwater streams, lakes, freshwater and saltwater marshes, mangrove fringes, cypress swamps, hardwood hammocks, sandhills, scrub, pine flatwoods, and rangeland. Nested between the Atlantic Ocean and the Gulf of Mexico, Florida has more than 2,000 kilometers of coastal beaches and estuaries. Special features include the Florida Keys, which constitute an archipelago of picturesque subtropical islands, and the unique Everglades, or "river of grass," which sprawls across the vast southern peninsula.