



“Providing a Balanced Approach to Natural Resource Management”

Position: Statistician/Programmer I

Northwest Management, Inc., a full-service natural resource consulting firm based in Moscow, Idaho, is seeking resumes from motivated individuals looking to work in a high-impact field of innovation and technology. Our team is seeking an experienced programmer (Python) with a foundation in applied statistics. Experience in testing and development of processes related to the analysis and use of large geospatial datasets (Multi-TB) is preferred. This position is responsible for designing and testing automated data pipelines, statistical modeling, and method/product documentation. Developing, troubleshooting, and validating custom-built, innovative programs to interpret and analyze LiDAR data, as well as graphical and statistical presentation of these data/methods. From the synthesis of scientific-publication level research to breaking ground in custom geospatial applications, this position works within a team of enthusiastic specialists who apply innovative ideas to extract useful information from LiDAR and other remotely sensed data. Expertise in design, development, implementation, and documentation are a must. Communication and innovation at every level is encouraged.

Status: Full Time, Salary, Professional Exempt

Salary: DOE

Time Frame: Starting As Soon As Available

Location: This position will report to our corporate office in Moscow, Idaho. Regular work will occur within the Moscow office computer lab. There will be occasional remote-work assignments, dictated by project needs.

Direction: This position will work under the direct supervision of the Technical Services Manager.

Primary Duties Include:

- Code, test, QAQC and apply statistical models for geospatial and data-mining applications with LiDAR data on natural landscapes.
- Develop innovative methods for answering client requests with LiDAR data, and expand the team’s applications of these data in natural resource management and stewardship.
- Analyze and resolve technical, mathematical, and statistical problems.
- Write functional and detailed design documentation, program specifications, test plans, and other system documentation.
- Independently recognize and resolve methodological and/or conceptual errors within our workflows.
- Maintains integrity of program logic and style and establishes required checks and balances for operational controls.
- Participate as a team member to plan, design, develop, test, and continually improve the quality and efficiency of products.

- Continue to expand the technical services network through targeted participation in promotional activities, proposal development, budgeting and project management related to remote sensing and GIS, as requested.

Minimum Qualifications:

- An MS or PhD degree in applied statistics, applied mathematics, computer science, or similarly highly technical field with research related to the natural environment, and a minimum 2 years' experience in data analysis, software development, and/or statistical modeling.
- Highly skilled with Python, C/C++, and/or R.
- Demonstrated ability to design, develop, test, document, apply, and explain, statistical/mathematical methods to extract actionable information from large, complex data sets that include 3D point clouds.
- Demonstrated ability to create and interpret complex statistical models and their predictions.
- Demonstrated background in statistical accuracy-testing and modeling.

Additional Desirable Qualifications:

- Demonstrated expertise in neural networks, computer vision, data mining, machine learning, and/or computer science. Experience with machine learning methods and tools including scikitlearn and keras.
- Experience working with remote sensing data (Imagery, Radar, etc.) and geospatial data structures in Python.
- Experience with LiDAR data; manipulation, acquisition technology and/or software applications in Python.
- Publication experience as a lead author in a scientific peer-reviewed journal.
- Experience in biometrics, forest growth modeling, or other forestry related work.
- Data visualization skills.
- Experience with relational databases and SQL, SQLite, and/or PostgreSQL.

The majority of work for this position occurs in a professional office environment. This position must regularly lift 15 pounds and occasionally lift and move up to 40 pounds. This position is occasionally required to stand; walk; climb or balance and stoop, kneel, crouch, or crawl in the outdoors, on uneven terrain and in inclement weather while operating technical data-collection equipment. The geographic working area is predominantly in the Inland Northwest; however, the operating area for this position includes the continental U.S. and occasional international travel.

If you are interested in this position please submit an application to careers@northwestmanagement.com

Closing Date: As soon as filled, 2022