

Job Announcement: Applied Python Analyst

Location: Moscow, ID Office

As a team Northwest Management, Inc. (NMI) provides a broad spectrum of services spanning synthesis of scientific research through innovations in custom geospatial modeling applications. The Applied Python Analyst role includes participating in continuous exploration, integration, deployment, testing, and security of tools while working to help build a culture of shared responsibility. The main responsibilities of this position are designing and testing automated data pipelines, statistical modeling, and method/product development and documentation within the Company’s Lidar services. 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 to the team is the day-to-day. Lidar data analysis, datamining, statistical testing, and an understanding of machine learning, deep learning, and CNNs are at the foundation of this position’s skills. Communication and innovation are essential. This position will additionally provide introductory training to other Company staff regarding workflow processes, Python programming, applied statistics, and/or datamining/interpretation.

Duties and Responsibilities:

- Code, test, 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.
- Maintain integrity of program logic and style and establish 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.
- Ability to spend up to two (2) weeks in the field at a time with minimal supervision collecting geospatial field data anywhere in continental USA.
- Take independent action to correct problems encountered during systems operations within authority level granted by leadership.
- Record activities accurately on timecards.
- Follow all policies and administrative procedures as identified in the NMI *Employee Handbook and Safety Plan*.
- Other duties as assigned.

Qualifications:

- An MS or PhD degree in geology, physics, mathematics, computer science, or other highly technical field with a connection to research on natural environments; and a minimum of two (2) years’ experience in quantitative data analysis, software development, and/or applied statistical modeling.
- Highly skilled with Python, and/or R.
- 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.
- 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 deep learning. Experience with machine learning methods and tools including scikit-learn and Keras among others.
- 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 with relational databases and SQL or PostgreSQL.
- Creative and versatile data visualization skills.

Benefits:

- Competitive wage: DOE
- Paid holidays, vacation, and sick leave
- Healthcare, including Medical, Dental, Vision, and Prescription Benefits
- Flexible spending account (FSA) for health care costs
- Life insurance, short-term and long-term disability plan
- 401k retirement plan with company contribution (after one year of service)
- On-the-job training, skills development, and career advancement opportunities
- Professional development support
- Employee recognition programs
- A supportive and engaging work culture promoting healthy living

Closing Date: April 26, 2024

If interested in this position, please apply to our Careers Email at careers@northwestmanagement.com.

Northwest Management, Inc. is an Equal Employment Opportunity employer. We employ without regard to race, color, religion, gender, national origin, veteran status, age, disability, marital status, genetics, or other status protected by law.