

Data Scientist

Apply

Rockville, MD

(ID: 2024-6083)

Axle is a bioscience and information technology company that offers advancements in translational research, biomedical informatics, and data science applications to research centers and healthcare organizations nationally and abroad. With experts in biomedical science, software engineering, and program management, we focus on developing and applying research tools and techniques to empower decision-making and accelerate research discoveries. We work with some of the top research organizations and facilities in the country including multiple institutes at the National Institutes of Health (NIH).

Axle is seeking a **Data Scientist** to join our vibrant team at the National Institutes of Health (NIH) supporting the **National Center** for **Advancing Translational Sciences (NCATS)** located in **Rockville, MD**.

Benefits We Offer:

- 100% Medical, Dental & Vision Coverage for Employees
- Paid Time Off and Paid Holidays
- 401K match up to 5%
- · Educational Benefits for Career Growth
- · Employee Referral Bonus
- Flexible Spending Accounts:
 - Healthcare (FSA)
 - Parking Reimbursement Account (PRK)
 - Dependent Care Assistant Program (DCAP)
 - Transportation Reimbursement Account (TRN)

We are seeking a highly skilled and motivated Data Scientist to support the development of scalable state-of-the-art biomedical image analysis software and tools. This role will focus on integrating artificial intelligence (AI), computer vision, and other advanced image analysis methods into high throughput screening (HTS), high content screening (HCS), and related biomedical image analysis tasks. The successful candidate will collaborate with a multidisciplinary team of scientists, software engineers, and biologists to drive advancements in translational sciences. The ability to think critically and work independently as a part of a team is a must. A strong preference will be given to data scientists with a background in the development of image analysis pipelines. A background in biology and/or medicine is preferred.

Responsibilities

- Develop, implement, and optimize AI and computer vision algorithms for processing and analyzing biomedical imaging data from HTS, HCS, and other high-dimensional datasets.
- Design and develop software tools and pipelines for automated image analysis, data integration, and visualization, leveraging machine learning and deep learning techniques.
- Collaborate with biologists and other researchers to understand their needs and translate them into technical solutions, incorporating state-of-the-art AI methodologies.
- Perform data mining, statistical analysis, and machine learning on large-scale biomedical imaging datasets to extract meaningful insights and improve predictive accuracy.
- Validate and benchmark Al-driven imaging algorithms and tools to ensure their accuracy, robustness, and scalability.
- Document software development processes, create user manuals, and provide training and support to end-users, particularly focusing on AI applications.
- Stay up-to-date with the latest advancements in AI, computer vision, biomedical imaging, computational biology, and data science, and apply this knowledge to improve existing tools and methodologies.
- Participate in interdisciplinary team meetings, present findings, and contribute to scientific publications and grant proposals, emphasizing AI and computer vision innovations.
- Identify and implement new AI technologies and frameworks to enhance the capabilities of biomedical imaging tools and methodologies.
- Knowledge of code packaging, containerization technologies, and continuous integration pipelines.
- Some experience in common workflow language is a plus.

Qualifications

- Ph.D. or Master's degree in Data Science, Computer Science, Biomedical Engineering, Bioinformatics, or a related field.
- Proven experience in biomedical imaging analysis, Al, and computer vision, preferably in HTS and HCS contexts.
- Strong programming skills in languages such as Python, R, Java, or C++.
- Proficiency with AI and machine learning frameworks and libraries such as TensorFlow, PyTorch, or scikit-learn.
- Experience with image analysis software and libraries such as ImageJ, CellProfiler, OpenCV, or similar.
- Knowledge of statistical analysis and data visualization techniques.
- Familiarity with high-performance computing and cloud-based data processing environments.
- Excellent problem-solving skills and the ability to work both independently and as part of a team.
- Strong communication skills and the ability to convey complex technical concepts to non-technical audiences.
- Experience in developing Al-driven software tools for biomedical research.
- Experience with version control systems such as Git.
- Previous experience working in a collaborative, interdisciplinary research environment.

Benefits

- 100% Medical, Dental & Vision premium coverage for Employees
- Paid Time Off (Including Holidays)
- · Employee Referral Bonus
- 401K Match
- Tuition reimbursement and professional development opportunities
- Flexible Spending Accounts:

- Healthcare (FSA)
- Parking Reimbursement Account (PRK)
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The diversity of Axle's employees is a tremendous asset. We are firmly committed to providing equal opportunity in all aspects of employment and will not tolerate any illegal discrimination or harassment-based age, race, gender, religion, national origin, disability, marital status, covered veteran status, sexual orientation, or status with respect to public assistance, and other characteristics protected under state, federal, or local law and to deter those who aid, abet, or induce discrimination or coerce others to discriminate.

Accessibility: If you need accommodation as part of the employment process, please contact:

Email: careers@axleinfo.com

Disclaimer: The above description is meant to illustrate the general nature of work and the level of effort being performed by individuals assigned to this position or job description. This is not restricted to a complete list of all skills, responsibilities, duties, and/or assignments required. Individuals may be required to perform duties outside of their position, job description or responsibilities as needed.

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