



Alta Resource Technologies, Inc.

Data Engineer

Location: Boulder, CO (onsite/hybrid)

Reports To: VP Data and Information Systems

About Us

Alta is reinventing how the world sources critical minerals — using protein-based chemistry to extract rare earth elements and other essential materials from challenging feedstocks with unmatched selectivity. By dramatically reducing the cost and environmental impact of mineral separation, Alta is making it possible to unlock new sources of supply for 21st-century technologies. As global demand accelerates, securing these materials has become one of the most urgent challenges facing U.S. competitiveness and national security. Backed by top investors and government partners, Alta is growing fast and hiring mission-driven scientists and engineers to help us scale our platform and transform the future of mining.

Role Summary

We are seeking a **Data Engineer** with experience handling diverse scientific datasets. The person in this position will be tasked with developing pipelines to securely store raw data, catalog this data and prepare it for downstream analysis. A successful candidate will establish real time monitoring of laboratory systems and accelerate product development by facilitating data integrity and real time analysis and dashboards for a variety of data types. This position will report to the VP Data and Information Systems.

Key Responsibilities

Data Management and Security

- Ensure that data are captured, cataloged and stored in a manner that follows F.A.I.R principles. This includes implementing tests to verify data validity and integrity.
- Ensure that required data from various laboratory instruments are captured and secured. This may involve developing infrastructure for some instruments that don't have enterprise software.
- Develop processes to ensure data management is integrated with other support systems (LIMS, JIRA, etc)

Cross-Functional Collaboration

- Develop dashboards that allow key stakeholders to monitor processes and results in real time.
- Work hand-in-hand with technical and project leads (process engineering, chemistry, biology, biotech) to ensure the necessary data and data reports are available to the appropriate stakeholders.
- Ensure all data packages and pipelines are documented and tested.

Cybersecurity and compliance

- Work with vendors and partners to ensure our systems are secure and that we collect necessary evidence to ensure compliance.
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Required Qualifications

- 3-8 years experience developing datastores for scientific databases. These may include SQL and NoSQL solutions.
 - Proficiency with shell scripting and common scripting languages such as Python.
 - Proficiency with workflow management tools such as Nextflow or Snakemake.
 - Understanding of version control and experience with version control systems such as git.
 - Experience with dashboard development tools such as Dash or Streamlit.
 - Experience working with Laboratory Information Management Systems (LIMS) or Scientific Data Management Systems (SDMS).
 - US Citizenship required.
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Preferred Qualifications

- Experience with common cloud providers (AWS/Azure)
- Experience managing spectroscopy and spectrometry data.
- Google API experience.
- Experience supporting cybersecurity protocols.
- Experience with LIMS and Jira APIs

Compensation & Benefits

Data Engineer and compensation commensurate with experience (\$100,000 - \$150,000).

Full benefits package including medical, dental, and 401(k).

How to Apply

To apply, please email your resume and a cover letter (see below) to talent@altatech.io.

Include your name and the job title in the subject line (i.e., [Your Name] – [Job Title]). All applications **must include** a one-page cover letter. The cover letter should clearly state your interest in the position and our company, outline 2–3 specific technical skills or accomplishments relevant to the role, and demonstrate how your experience aligns with our mission and technology platform. We expect concrete examples that illustrate measurable impact and collaborative problem-solving in technology development. **Applications submitted without a cover letter will not be considered.**