

## GIS Data Engineer

Location: Remote US

Job Term: Full-Time

### The Opportunity:

At Picarro, Software Engineering focuses on developing and deploying industry vertical applications to clients in the Scientific and Energy communities. This specific role is focused on the suite of solutions, such as greenhouse gas emissions quantification, pipe replacement, and advanced leak detection, used by our gas utility and pipeline customers. The majority have a web-based user interface, but the backend utilizes geoprocessing, data, and ML services. While the products are designed to meet the needs of the industry, they sit within Picarro's larger analytical suite/ distributed framework, so a wider collection of skills is desired. The data engineer participates in the design, programming, testing, documentation and implementation of data integrations, database management, and related processes/systems. Please reach out if you have a love of spatial data and a passion for emissions reduction and pipeline safety.

This position reports to the **GIS Software Development Manager**. The position may be on-site based out of our Santa Clara, CA office or remote/hybrid format nearby team members in Raleigh, NC, Denver, CO, or Salt Lake City, UT.

### Key Responsibilities:

- Develop and maintain multiple extract, transform, and load (ETL) processes using dozens of FME workbenches to integrate spatial data from various sources and data types into ArcGIS Online and Geoserver.
- Define and implement standard processes for extracting, formatting, validating, and versioning multiple large Utility Network datasets.
- Design, document, and implement an OLAP database and ETL pipeline solution to support multiple GIS-based web applications, Business Intelligence dashboards, and data scientists.

Design, develop, and maintain data pipelines to support GIS based web applications within

Picarro's SaaS platform, leading the integration of ArcGIS web and geoprocessing services.

- Document technical detail of work using Jira and Confluence.

## Desired Skills and Experience:

- 3+ years of experience designing, developing, and maintaining data pipelines and data integrations using FME Desktop/Form and FME Server/Flow.
- 3+ years of experience working with ESRI technologies including ArcGIS Pro, ArcGIS Online, and ArcGIS Developer APIs (REST and Python).
- 3+ years of experience using SQL databases and NoSQL databases (example SQL server, PostgreSQL, MySQL, ElasticSearch, DynamoDB, MongoDB).
- 1+ years of experience with geospatial libraries in Python including ArcPy, GeoPandas, Shapely, GDAL/OGR, PyProj, etc.
- 1+ years of experience in Data Architecture, Data Modelling, Geodatabase design, Master Data Management, Data Integration, Data Marts/Warehouses and Data Reporting and Analytics.
- Working knowledge of geospatial data types including GeoJSON, Geodatabase, Geopackage, and PostGIS geographies.
- Experience designing and developing applications on public clouds such as AWS (preferred), Azure, or Google Cloud.
- Bachelor's or master's degree in GIS, geography, computer science, data engineering, or related field.

## Preferred qualifications for this role:

- Experience with Geoserver.
- Domain specific knowledge, specifically:
  - Gas Utility Domains and associated data,
  - Understanding of the Geometric Network, ESRI UPDM and Pipeline/Gas Utility Data Models.
- Working knowledge architecting and designing end-to-end Geospatial solutions on ESRI platforms.

## Salary & Benefits:

The base salary range for this full-time position is \$95,000 - \$125,000. Your base salary and title will be determined based on the location, experience, qualification, skills, knowledge, level, and pay of employees in similar positions.

We offer a comprehensive benefits package including:

- Medical, Dental, and Vision insurance
- Flexible Spending Account (FSA) and Health Savings Account (HSA) plans
- Life, Short-Term Disability, and Long-Term Disability insurance
- Paid Time Off and Paid Holidays
- Employee Referral program
- 401K
- Social events (summer picnic, holiday party, team lunches, etc.)
- On-site Health & Wellness programs (fitness challenges, outdoor bootcamp, flu-shots, etc.)

## About Picarro:

Picarro is pioneering a unique confluence of hardware, software and cloud-based computing unlike anything being done today. By manufacturing the precision instruments at the core of this technology as well as developing the algorithms that enable cogent information to be derived from the data, we are transforming how world-class scientific, industrial and regulatory compliance measurements are made, and more importantly, who makes them.

Infrared optical spectroscopy is a proven technology for delivering precise, real-time measurement of the constituents in a gas stream with high sensitivity and selectivity. Recent developments in laser technology allow for a very significant increase in the number of species that can be measured simultaneously, leading to an unprecedented increase in the amount of information that can be collected and to corresponding challenges in extracting information from the results.

*All qualified applicants will receive consideration for employment without regard to race, sex, color, religion, national origin, protected veteran status, gender identity, social orientation, nor on the basis of disability.*

*Posted positions are not open to third party recruiters/agencies and unsolicited resume submissions will be considered free referrals.*

*If you are an individual with a disability and require a reasonable accommodation to complete any*