



Geospatial Data Engineer

Location

Remote

Type

Full time

Department

Engineering

OverviewApplication

We are seeking a highly skilled and motivated Data/Geospatial Engineer to join our dynamic team. In this role, you will play a pivotal role in the transformation and management of geospatial data, ensuring its accuracy, availability, and usability for a variety of applications. You will collaborate closely with cross-functional teams to develop data models, optimize spatial operations, and contribute to the development of customer-facing APIs.

A bit about you 🙋

- Bachelor's or Master's degree in Computer Science, Geospatial Science, or related field.
- Proven experience in **geospatial data management** and transformation.
- Strong background in data engineering, including data lake and **pipeline management** (5+ year).
- Proficiency in databases such as Postgres and PostGIS.
- Exceptional knowledge of data modeling and spatial concepts.
- Proficiency in SQL and Python; knowledge of Spark, Typescript and JavaScript is a plus.
- Experience in spatial optimization and customer-facing **API development** is advantageous.
- Excellent problem-solving skills and a keen attention to detail.
- Effective communication and team management skills

About your role at Ready ⚡

- **Geospatial Data Modeling:**
 - Collaborate closely with the frontend team, product team, and geospatial data scientist to understand the challenge and provide data modeling solutions.
 - Ensure data models are adaptable to evolving project needs and future scalability.

- Design and optimize database schemas to support spatial-temporal queries and analyses.
- Implement data indexing and partitioning strategies for improved query performance.
- Data Transformation and Ingestion:
 - Execute data transformation processes to convert raw geospatial data into structured formats.
 - Orchestrate the data transformation and ingestion workflow with Airflow.
 - Set up scheduled data transformation and ingestion jobs for scalability.
- Data Storage and Maintenance:
 - Implement and maintain data lake and **data warehouse** architecture for efficient storage and retrieval of geospatial data.
 - Design different strategies for optimizing the spatial-temporal data storage, update, and backup.
 - Design and implement best practice with cloud solutions: AWS and GCP.
- Spatial Data Expertise:
 - Apply expertise in static tiling, dynamic tiling, and raster tiles to optimize the retrieval and rendering of geospatial data.
 - Maintain the tileserver for performance and reliability
 - Implement spatial indexing and caching strategies to accelerate spatial data access.
- Data Verification:
 - Develop **automated data verification pipelines** to validate the quality and consistency of geospatial datasets.
 - Leverage statistic and data visualization tools to validate the data or identify data abnormalities.
 - Implement **data cleansing and transformation routines** to correct errors and inconsistencies.
 - Monitor data verification processes and promptly address issues to maintain data reliability.
- Programming languages:
 - Utilize SQL and Python to perform data manipulation, transformation, and analysis tasks.
 - Develop custom scripts and functions to **automate geospatial data processing workflows**.
 - Develop custom packages for data engineer team to share
 - Stay updated on the latest updates in cloud SQL and Python for data engineering.
- Customer-Facing API Development:
 - Contribute to the development of customer-facing APIs that expose geospatial data and services.
 - Ensure API endpoints are well-documented, secure, and efficient in data retrieval and delivery.
 - Collaborate with frontend developers to integrate APIs seamlessly into applications.
- Machine Learning, Optimization and AI - From Solution to Production:
 - Collaborate with domain experts to understand specific spatial challenges and devise effective solutions.

- Solve complex spatial optimization problems, such as route planning and network planning, to enhance geospatial capabilities.
 - Work on integrating machine learning or AI frameworks into production environments to leverage geospatial data.
 - Collaborate with data scientists and AI engineers to deploy models that enhance geospatial capabilities.
 - Ensure the scalability and reliability of AI-driven solutions for geospatial applications.
- About Ready 🚀
 - Creative problem solvers approaching an antiquated system with a revolutionary viewpoint.
 - Humble but ambitious, knowledgeable but curious, persistent but not obnoxious.
 - Concise and effective in written and spoken communication.
 - Comfortable working remotely.

About what you get...

- Competitive salary plus meaningful equity upside; salary range is \$140,000 to \$180,000
- Competitive (and ever expanding) benefits for employees and dependents
- Opportunities to learn and grow – all things startups
- A chance to play a role in defining the roadmap as we pursue a bold vision and a big goal
- Work from anywhere you want, as long as you can get great internet (and your work here at Ready helps make this true in more places).
- To get away - we all convene 2-3x / year for [optional, encouraged] retreats
- We're actively shaping our benefits program: have a say in which benefits matter to you
- The charter to realize a market that is set to receive \$65 billion in grant funding across the United States

Apply for this Job

This site is protected by reCAPTCHA and the Google [Privacy Policy](#) and [Terms of Service](#) apply.