



RENEWABLES FIRST

Data Engineer

Location: G-8 Markaz, Islamabad
Department: Data Analytics
Employment Type: Full time
Contract: 1 year

About Renewables First

Renewables First (RF) is a think tank for energy and the environment. Our work addresses critical energy and natural resource issues to make energy and climate transitions just and inclusive. By emphasizing inclusivity and immediate action, we are positioned to drive change that is both sustainable and equitable.

Job Description

On a journey to become a data-driven organization and to strengthen our core team, we are seeking a **Data Engineer** to join our **Data Analytics** team. The data engineer is responsible for designing, building, and maintaining the infrastructure that supports efficient data storage, processing, and analysis. This role plays a key part in developing and managing scalable data pipelines that ensure reliable data integration, transformation, and delivery across all teams at Renewables First.

Key Responsibilities

- Collaborate with stakeholders to understand data requirements and design efficient database structures. Develop and implement database solutions.
- Design, develop, and maintain ETL processes to extract, transform, and load data from diverse sources into databases or data warehouses. Troubleshoot and resolve ETL process issues, data anomalies, and performance bottlenecks.
- Integrate data from various internal and external sources, including data providers, APIs, and databases, to ensure a comprehensive and up-to-date data repository.
- Develop and maintain internal data repositories using existing RF datasets, as well as a structured and scalable data repository of Pakistan's power sector datasets.
- Optimize database performance through efficient query design, indexing, and data normalization. Implement data caching and indexing strategies to enhance query performance.
- Implement and enforce data security measures to safeguard sensitive information. Ensure compliance with data protection regulations and best practices.
- Create and maintain comprehensive documentation of database designs, configurations, and ETL processes. Provide training and support to other team members on database-related topics.
- Work closely with application developers, analysts, and other stakeholders to understand data requirements and optimize database performance. Participate in cross-functional teams to address database-related challenges



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Qualifications and Skills

- Bachelor's degree in Computer Science, Data Science, Software Engineering, Information Systems, or a related quantitative field;
- Minimum two years of proven experience in data management, including data integration, modelling, optimization, and data quality.
- Demonstrated experience in designing and building comprehensive data repositories.
- Strong understanding and practical experience in building and automating ETL pipelines, working with structured and unstructured data.
- Proficiency in working with APIs, data ingestion from public sources, and integrating data from disparate systems.
- Expertise in Apache technologies (e.g., Kafka, Airflow, Spark) to build scalable and efficient data pipelines.
- Hands-on experience in designing, developing, testing, and maintaining data services on Microsoft Azure or AWS.
- Deep understanding of data governance, including data logging, profiling, stewardship, and quality assurance.
- Excellent command over SQL and Python; knowledge of additional languages or scripting tools is a plus.
- Familiarity with data visualization tools (e.g., Tableau, Power BI) is a plus.
- Strong analytical and problem-solving skills.
- Excellent communication and collaboration abilities

We Offer

- Competitive salaries and remuneration.
- Opportunities for personal and professional growth and development.
- The chance to work with a resolute and committed team on key future tasks.
- A diverse working environment in a cooperative working atmosphere.
- Flat communication and decision-making hierarchies.
- A friendly and supportive team, all passionately committed to addressing the climate and energy crises

Application

Applications open on 27th May 2025. We process applications on a rolling basis. Please email a letter of motivation, along with your **CV in one pdf document** and use the following format for the file name, "**First name_Last name_Job Title**" to hr@renewablesfirst.com.pk.