Job Description – Data Science Engineer

Designation	Data Science Engineer
Department	QAMIS
Location	Mumbai
Employment Type	Renewable Full Time Employment Contract
Report to	Manager Data Science Engineer

Organization Background

Established in 2007, Educate Girls' is a non-profit that focusses on mobilizing communities for girls' education in India's rural and educationally backward areas.

Strongly aligned with the 'Right to Education Act' or the 'Samagra Siksha', Educate Girls is committed to the Government's vision to improve access to primary education for children, especially young girls.

For further details about organization please visit www.educategirls.ngo

Our Values

Gender Equality	Being able to treat people equally irrespective of gender
Integrity	Possess the ability to "know and do" what is right
Excellence	Being outstanding or extremely good, striving to lead by performance excellence
Collaboration	Working effectively and inclusively with a range of people both within and outside of the organization
Empathy	Being able to understand and share the feelings of another and use that understanding to guide our actions

Our Competencies

Strategic Thinking – Think big yet act focused	**Taking Ownership** – Feel responsible & accountable	**Analytical Thinking** – Stay true to your data
Developing Talent – Growing and taking people together		**Ensuring Alignment** – Think differently but work together

Job Profile

The Data Science Engineer is expected to lead the data science and engineering team help EG maximize its impact by leveraging data and technology. This role entails both individual contribution as well as team management. This role is instrumental in improving the predictive analytics capabilities of the team and enabling rapid course correction in program delivery by building models and automated processes. Efficient management and mining of primary and secondary data sources to enable timely and error-free reporting to our stakeholders will also be a key responsibility of this role. This role will help grow data-driven decision making in the organization.

Areas of Responsibility

- Data Modelling & Analysis
    - Interpret data and analyze results and trends, using statistical techniques where appropriate.
    - Develop comprehensive dashboards to monitor performance & quality of program delivery.
    - Leverage predictive modeling to optimize targeting, improve program delivery, increase the pace of course correction, and more.
    - Capture operational requirements, formulate the ML questions and liaise with IT vendor to implement the ML models.
    - Prototype ideas, research and develop custom data/ML models and algorithms as required; test model quality through A/B testing.

- Data Engineering
    - Build efficient and well documented methods for easy, repeatable extraction, cleaning and validation of data from primary and secondary data sources.
    - Build automated data pipelines & add data sources as required.
    - Automate manual processes; build the infrastructure necessary for optimal extraction, transformation, and loading of data (from a variety of sources leveraging Azure/AWS/ Python/SQL technologies)
    - Optimize data delivery and data management practices of EG.

- People Management
    - Lead the data science and engineering team.
    - Strive for excellence in performance of both self and team.
    - Prepare questionnaire/assessment and conduct interviews to hire consultants and/or employees in data related roles for the QAMIS team or other teams.

- **Liaise with:**
  Internal: Program & Operations
  External: None

Education Background

- Minimum is a Bachelor's Degree in a relevant data science field or a related field of study. A Master's Degree in Science/Engineering/Management is desirable.

Work Experience

- Minimum 5 years of relevant work experience data analytics/data visualization/ data management

- Minimum 3-5 Years of SQL experience and demonstrated ability to design and analyze data in relational databases. Experience with PostgreSQL desirable.
- Minimum 3-5 years' experience in data manipulation/cleaning using Python. Experience in Pandas and machine learning using Python is desirable.
- Experience in designing and developing dashboards.

Skills Set

- **Soft skills:**
    - Excellent communication skills
    - Critical & analytical thinking
    - Target driven
    - Interpersonal skills

- **Technical skills:**
    - Intermediate to advanced skills in SQL.
    - Basic to intermediate skills in Python and Linux.
    - Demonstrated experience in dashboard design & development.
    - Demonstrated analytical and assessment skills of quantitative and qualitative data.
    - Strong skills in data modelling and analysis.
    - Experience of machine learning.
    - Knowledge of statistical analysis software (such as Stata, SPSS) would be a bonus.
    - Experience in version control using github.
    - Proficient in Linux.
    - Good to have experience in AWS EC2, S3, Lambda, API Gateway etc.

Travel requirement

- Willingness to travel up to 25% of the time at the State/district level in program geographies

"Educate Girls is committed to achieving 50/50 gender balance in its staff. Female candidates are strongly encouraged to apply for this position."