1. Data Engineer

Job Roles

- Scrape Data from the given sources.
- Move/Store the data in optimal servers/warehouses.
- Build data pipelines/APIs for easy access to the data.
- Handle databases/data warehouses.

to make data warehouses

Skills Required

- Strong grasp of algorithms and data structures
- Programming Languages (Java/R/Python/Scala) and script writing
- Advanced DBMS's
- BIG DATA Tools (Apache Spark, Hadoop, Apache Kafka, Apache Hive)
- Cloud Platforms (Amazon Web Services, Google Cloud Platform)
- Distributed Systems
- Data Pipelines

OLTP → online transaction processing
↳ DB

OLAP → online analytic
↓
Data warehouse
maintaining Pipeline

2. Data Analyst

Responsibilities of a Data Analyst

- Cleaning and organizing Raw data.
- Analyzing data to derive insights.
- Creating data visualizations.
- Producing and maintaining reports.
- Collaborating with teams/colleagues based on the insight gained.
- Optimizing data collection procedures

Skills

- Statistical Programming
- Programming Languages (R/SAS/Python)
- Creative and Analytical Thinking
- Business Acumen — Medium to High preferred
- Strong Communication Skills.
- Data Mining, Cleaning, and Munging
- Data Visualization
- Data Story Telling
- SQL
- Advanced Microsoft Excel

"A data scientist is someone who is better at statistics than any software engineer and better at software engineering than any statistician".

✓ Maths↑, Analytical skills✓, All algo.

4. ML Engineer

Responsibilities

- Deploying machine learning models to production ready environment
- Scaling and optimizing the model for production
- Monitoring and maintenance of deployed models

Skills

- Mathematics
- Programming Languages (R/Python/Java/Scala mainly)
- Distributed Systems
- Data model and evaluation
- Machine Learning models
- Software Engineering & Systems design

	ANALYTICAL SKILLS	BUSINESS ACUMEN	DATA STORYTELLING	SOFT SKILLS	SOFTWARE SKILLS
DATA ANALYST	HIGH	MEDIUM TO HIGH	HIGH	MEDIUM TO HIGH	MEDIUM
DATA ENGINEER	MEDIUM	LOW	LOW	MEDIUM	HIGH
DATA SCIENTIST	HIGH	HIGH	HIGH	HIGH	MEDIUM
ML ENGINEER	MEDIUM TO HIGH	MEDIUM	LOW	HIGH	HIGH