Role as a Data Scientist

EURON

euron.

Entry-Level (0-2 years)

Ideal for freshers, recent graduates, and early-career professionals looking to start in data science.

1. Junior Data Scientist

- **Responsibilities:**
  - Collect, clean, and preprocess data.
  - Build and validate machine learning models.
  - Perform exploratory data analysis (EDA).
  - Work on feature engineering and model tuning.
- **Skills Required:** Python/R, SQL, Statistics, Pandas, NumPy, Scikit-learn, Data Visualization.

2. Machine Learning Engineer (Junior)

- **Responsibilities:**
  - Implement and optimize ML models.
  - Work on feature engineering.
  - Deploy models using Flask/FastAPI.
  - Automate ML pipelines.
- **Skills Required:** Python, TensorFlow/PyTorch, ML Algorithms, APIs, Docker, CI/CD.

3. AI Research Intern / Associate

- **Responsibilities:**
  - Conduct research on AI models.
  - Implement novel algorithms.
  - Work on deep learning architectures.
  - Write research papers.
- **Skills Required:** Python, TensorFlow, PyTorch, AI/ML Research, Mathematics.

Mid-Level (3-7 years)

Professionals who have developed expertise in data science and are ready for more complex projects.

4. Data Scientist

- **Responsibilities:**
    - Develop predictive models.
    - Conduct A/B testing.
    - Work on NLP, computer vision, or time-series forecasting.
    - Deploy models into production.
- **Skills Required:** Python, SQL, Statistics, ML/DL, Cloud Platforms, Feature Engineering.

5. Senior Data Scientist

- **Responsibilities:**
    - Lead data science projects.
    - Develop advanced AI models.
    - Work with stakeholders to define business problems.
    - Optimize and scale machine learning models.
- **Skills Required:** Python, TensorFlow/PyTorch, MLOps, Cloud, Experimentation.

6. Applied Scientist

- **Responsibilities:**
    - Focus on R&D for AI models.
    - Work on mathematical optimization of models.
    - Research new algorithms and their applications.
- **Skills Required:** Advanced ML, Reinforcement Learning, AI Research, Mathematics.

7. Deep Learning Engineer

- **Responsibilities:**
    - Design and train deep learning models.
    - Optimize neural networks for performance.
    - Deploy deep learning models on edge devices/cloud.
- **Skills Required:** Python, PyTorch, TensorFlow, Computer Vision, NLP.

Experienced Level (8-15 years)

Advanced professionals leading data science initiatives and teams.

8. Lead Data Scientist

- **Responsibilities:**
    - Manage data science projects end-to-end.
    - Design scalable ML pipelines.
    - Mentor junior data scientists.
    - Improve ML production systems.
- **Skills Required:** ML Engineering, Cloud AI, MLOps, Data Strategy.

9. Principal Data Scientist

- **Responsibilities:**
    - Work on cutting-edge AI applications.
    - Drive AI adoption in the organization.
    - Collaborate with executives to implement AI strategies.
- **Skills Required:** Enterprise AI, Research & Development, AI Strategy.

10. AI/ML Architect

- **Responsibilities:**
    - Design AI architectures for large-scale applications.
    - Define ML model deployment strategies.
    - Integrate AI with cloud-based solutions.
- **Skills Required:** AI/ML Strategy, Cloud AI, Model Optimization, MLOps.

Senior Leadership (15-20+ years)

Top-tier leadership roles that drive AI and data science at the enterprise level.

11. Director of Data Science

- **Responsibilities:**
    - o Oversee AI teams and projects.
    - o Define the company's AI vision.
    - o Manage AI strategy execution.
- **Skills Required:** Leadership, AI Strategy, Business Acumen, Enterprise AI.

12. VP of Data Science & AI

- **Responsibilities:**
    - o Lead AI-driven business transformations.
    - o Expand AI applications across departments.
    - o Align AI initiatives with business goals.
- **Skills Required:** AI Business Strategy, AI Transformation, Executive Leadership.

13. Chief Data Scientist (CDS)

- **Responsibilities:**
    - o Set company-wide AI standards.
    - o Manage AI governance and ethics.
    - o Build a data-centric culture in the organization.
- **Skills Required:** AI Strategy, Leadership, Ethical AI, AI Governance.