

Data Scientist cover letter

Two sample letters, experienced and fresher. Keep the one closer to your situation, replace the text in [brackets] and every detail with your own.

SAMPLE LETTER: EXPERIENCED

Dear Hiring Manager,

I am applying for the Senior Data Scientist role in your risk team at [Organisation name]. I have six years of experience building credit and fraud models, currently at a digital lending company in Bengaluru.

My main work is the application scorecard for small personal loans. I rebuilt it using bureau data, bank statement features and device signals, replacing a rule-based system that rejected too many good customers. I worked closely with the credit policy team to set cut-offs, validated the model on out-of-time samples and documented it to meet our internal model risk standards. After launch, approval rates rose without any increase in early delinquency in the monitored cohorts. I also built a monitoring dashboard that tracks population stability and feature drift every week, so we catch problems before losses show up.

I write production-quality Python, work with Spark for large datasets and partner with ML engineers on deployment. I enjoy mentoring junior team members and reviewing their notebooks for leakage and sampling errors.

My notice period is sixty days. I would welcome the chance to discuss the risk problems your team is working on.

Regards,
[Your name]

SAMPLE LETTER: FRESHER

Dear Hiring Manager,

I am applying for the Junior Data Scientist position at [Organisation name]. I have just completed my M.Sc. in Statistics, and I am looking for a team where models are built to change a business decision, not only to score well on a leaderboard.

For my dissertation, I worked with anonymised data from a microfinance institution through my department's industry tie-up. The goal was to predict which borrowers were likely to miss a repayment in the next cycle. I compared logistic regression, random forest and gradient boosting models, handled heavy class imbalance with careful resampling and chose the simpler logistic model because the field officers needed to understand the reasons behind each score. I presented SHAP-based explanations to the institution's credit team, who agreed to pilot the score in two branches.

I work in Python with pandas, scikit-learn and XGBoost, write SQL comfortably and have basic experience deploying a model as an API with FastAPI. My project code and notes are on GitHub.

I can join immediately and would be happy to complete a take-home assignment. Thank you for reviewing my application.

Regards,
[Your name]

BEFORE YOU SEND IT

- Describe the decision your model supported, such as approvals, inventory or recommendations, and how it was tested against a baseline; accuracy numbers alone do not tell a hiring manager much.
- Show that you know the difference between data analysis and data science by naming the modelling, validation and deployment steps you personally handled.
- Link a GitHub repository or write-up with clean, documented code, and never include real customer data or proprietary features from an employer in a public project.
- Mention experimentation experience, such as A/B tests, guardrail metrics or causal methods, because many data science teams now expect it alongside machine learning.