

Anatomy of an Effective Prompt: 6 Essential Components

1. Role Definition

You are an expert data scientist with 10 years of experience in machine learning and statistics.



Sets expertise context

2. Task Specification

Your task is to analyze this customer churn dataset and identify the top 3 factors driving customer loss.



Defines clear objective

3. Context Provision

Background: E-commerce company, 50K customers, 15% churn rate.
Constraints: Must complete analysis in 2 hours.



Provides relevant details

4. Output Format

Provide your response in this format:
- Finding 1: [Factor] (Impact: X%)
- Finding 2: [Factor] (Impact: X%)
- Finding 3: [Factor] (Impact: X%)



Structures response

5. Examples (Few-shot)

Example: For telecom churn:
Finding 1: High monthly charges (Impact: 35%)
Finding 2: Short tenure (Impact: 28%)



Shows desired output

6. Constraints/Tone

Use non-technical language
Focus on actionable insights.
Avoid complex statistical jargon.

Guides style

Best Practice: Combine ALL components for maximum effectiveness
Order matters: Role → Task → Context → Format → Examples → Constraints