

- 1) Specific Instructions
- a) Structured Prompt With Clear Context
- 3) Model Remain unchanged

Pros

- 1) No technical expertise need
- d) Instant Risults
- 3) No training (ost (Frec)
- 4) Works with any LLM.

- 1) Prepare domain specific
 Training data
- a) Train model on data.
- 3) (rear a specifical version.

Pro's

- 1) Deeply Specialized Knowledge
- A) Consistant behaviour
- 3) No prompz Engineering
- 4) Bether for Specific domain

- 1) Store document in Vector DB
- 2) Retricte relicent does for Cach Guery
- 3) LLM generates answer from Context

Pros

- 1) Always up-to date
- 2) No bearing required
- 3) (ost effective
- 4) According is high.
- 5) Can private/property

(on

- 1) Infrastructure setup
- 2) Remierch quality affects
 Rusults
- 3) Contact Window Limitation.

Bust for

Cont

2) Require ML Exportse

- 1) Limited by Models base Kniwledge (1) Expensive [GPO]
- d) Inconsistent Rulls
- 3) Token limit Restrict Complexity
- 4) Can't add New Knowledge.

But for

1) Small Scale Application

- 3 Retraining for update
- But for

 Specific style

- 2) Generic purpose task 3) Quick protosyping.
- thigh volume When accuracy is critical

Al Customization Methods: A Beginner's Guide

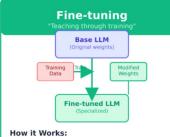
Understanding Prompt Engineering vs Fine-tuning vs RAG



Best For:

General-purpose tasksWhen you need flexibility

Small-scale applications



- · Prepare domain-specific training data
- Train model on your data
- Model weights are permanently changed
- · Creates a specialized version

- Deeply specialized knowledge
- · Consistent behavior
- No prompt engineering needed
- Can learn new writing styles
- · Better for specific domains

Cons:

- Expensive (\$1000s-\$10000s)
- Requires ML expertise
- Can "forget" general knowledge
- Needs retraining for updates

Rest For:

- Domain-specific languageHigh-volume, consistent tasks
- When accuracy is critical

RAG -User Query Base LLM (Unchanged) Retrieved Docs

How it Works:

- · Store documents in vector database
- Retrieve relevant docs for each query
- Combine docs with query as context
- · LLM generates answer from context

- Always up-to-date information
- No training requiredSource attribution/citations
- Can handle private/proprietary data
- · Cost-effective

Cons:

- Requires infrastructure setup
- · Retrieval quality affects results
- · Context window limitations

Rest For:

- · Real-time/frequently updated info
- · Customer support systems
- Compliance-heavy industries

Quick Decision Guide: Which Method Should You Use?