

What is Fine-Tuning?

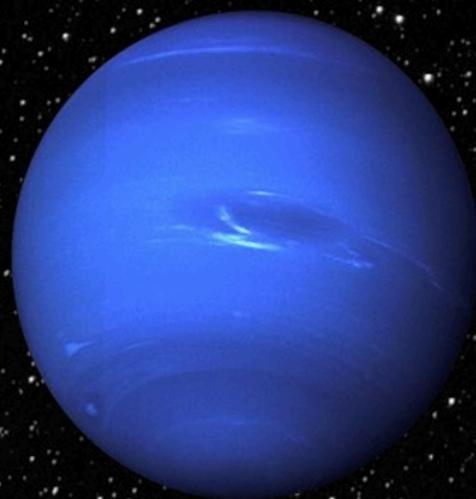
Instructor

Apoorv Vishnoi

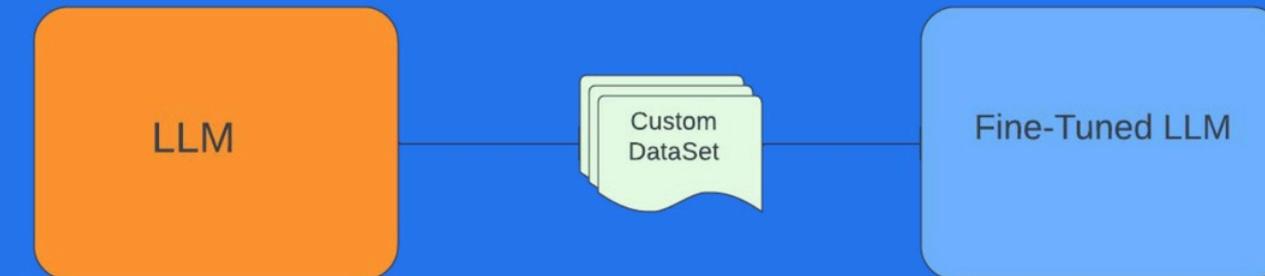
Head - Training Vertical at Analytics Vidhya



SECOND PLANET



FINE-TUNING



Base LLM



Fine Tuned LLM

Training for specific tasks

② Why do we need to fine-tuning?

Why do we need to fine-tuning?



Benefits of fine-tuning



Fine-Tuned LLMs Examples



Fine-tuned LLMs in Healthcare

- Deliver accurate medical info
- Assist in diagnosis
- Summarize clinical data



Fine-Tuned LLMs Examples

Fine-tuned LLMs in Finance



- Analyze Financial Reports
- Summarize Earnings Calls
- Identify Market Trends



Fine-Tuned LLMs Examples



Fine-tuned LLMs in Legal

- Contract Review
- Key Clause Identification
- Legal Summaries



Fine-Tuned LLMs Examples

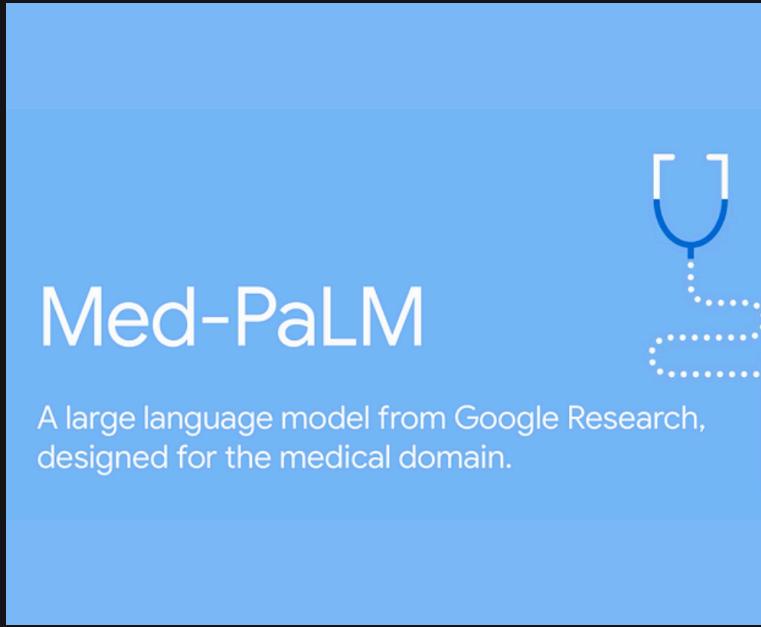


Fine-tuned LLMs in Customer Service

- Handle specific queries
- Faster response times
- Improved user satisfaction



Fine-Tuned LLMs

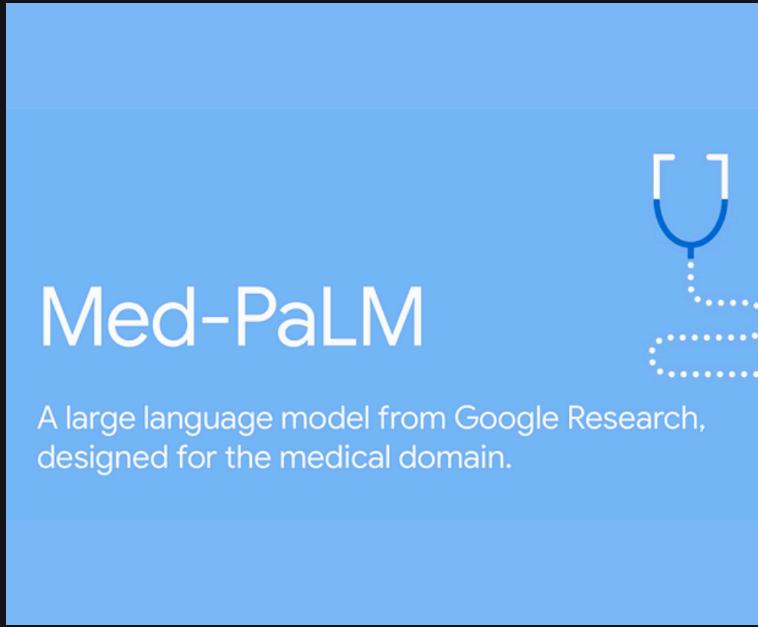


A large language model from Google Research,
designed for the medical domain.

Google's Medpalm

Medical applications, Assists Clinical
tasks and healthcare insights

Fine-Tuned LLMs



Med-PaLM

A large language model from Google Research,
designed for the medical domain.



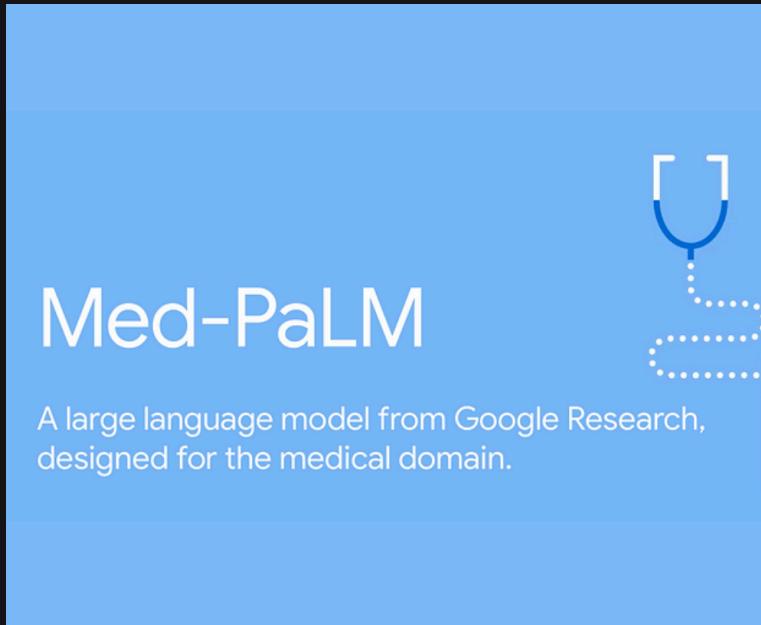
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Bloomberg GPT

For finance industry.

Fine-Tuned LLMs



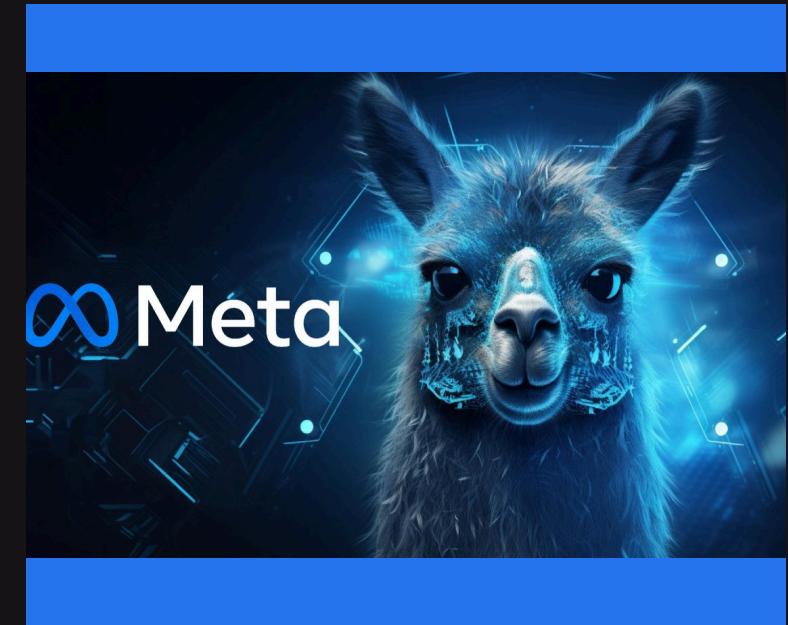
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Meta's Code Llama

Generate and complete code and support multiple programming languages

Challenges

1

Data Availability

Lack of quality task-specific data can lead to unreliable results.

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Data Availability

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2

Resource Requirements

Fine-tuning demands expensive hardware and high computing power.

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Data Availability

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Resource Requirements

Fine-tuning demands expensive hardware and high computing power.

3

Bias Amplification

Biased datasets can worsen outcomes, especially in sensitive areas like healthcare.

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4

Limited Use-case

AI Agents offer a cost-effective alternative for task-specific solutions, reducing the need for fine-tuning.

UpNext : RAG

Thank You