LLM Lingo: Must-Know Terms

Part 2: Fine-Tuning Edition

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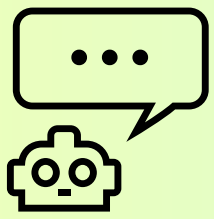
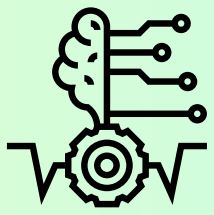
In-Context Learning



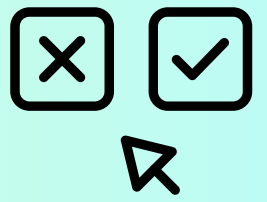
Integrating task examples into prompts, enabling LLMs to handle new tasks without fine-tuning.

SFT



Supervised Fine-Tuning. Updating a pre-trained LLM with labeled data to perform a specific task.

Contrastive Learning

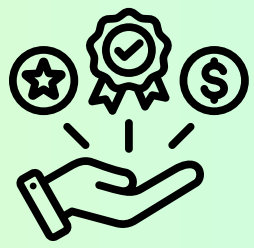


Fine-tuning method that improves LLM by teaching it to discern data similarity and differences.

Transfer Learning

Applying pre-trained knowledge from large datasets to improve LLM performance on smaller, task specific data.

Reward Modeling

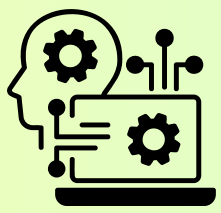


Designing objectives to reward LLM outputs during the reinforcement learning process.

Reinforcement Learning

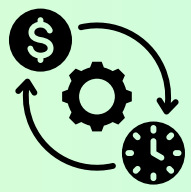
Training LLMs through trial and error, with rewards/penalties based on its generated outputs

RLHF



Reinforcement Learning from Human Feedback. Human feedback is used as reward/penalty for LLM

PEFT

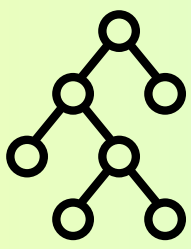


Parameter-Efficient Fine-Tuning updates only few parameters of LLMs and is hence both compute and cost efficient.

Quantization

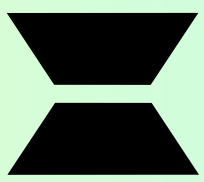
Reducing the precision of LLM parameters to save computational resources without sacrificing performance.

Pruning



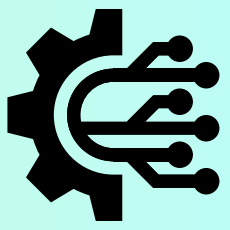
Trimming surplus connections or parameters to make LLMs smaller and faster yet performant

LoRA



Low-Rank Adaption is a PEFT method that inserts a smaller set of new weights to the LLM & trains only those.

Freeze Tuning



Fine-tune with most of the LLM's weights frozen, except for some layers, generally, the task specific layers