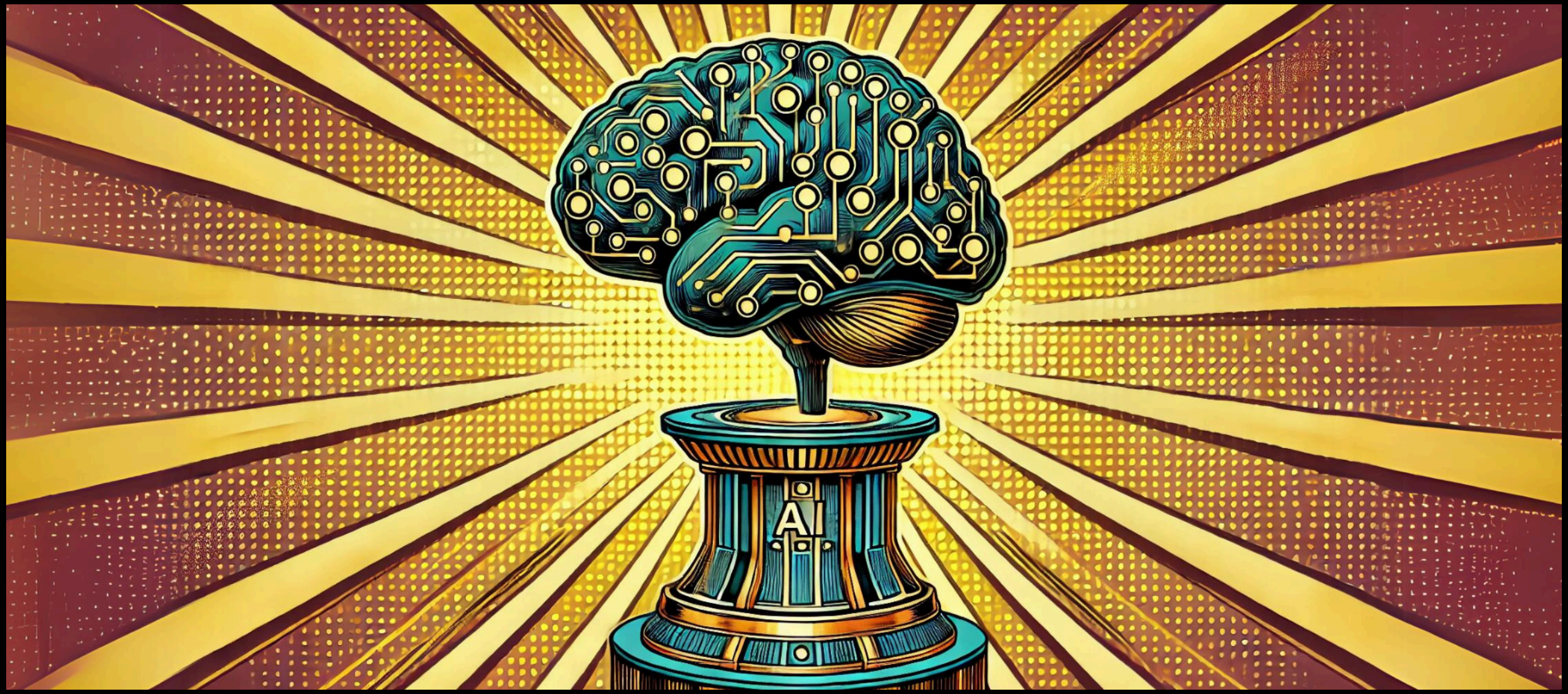
LLM Engineering

MASTER AI & LARGE LANGUAGE MODELS



PROGRESS

Proprietary Models Start Today

What you can now do

- Generate text and code with Frontier Models and Open Source models using APIs and HuggingFace, including tools, assistants and RAG
- Follow a 5 step strategy to solve problems, including dataset curation, making a baseline model, and fine-tuning a Frontier model
- Explain QLoRA for fine-tuning open-source models including defining target modules, r and alpha

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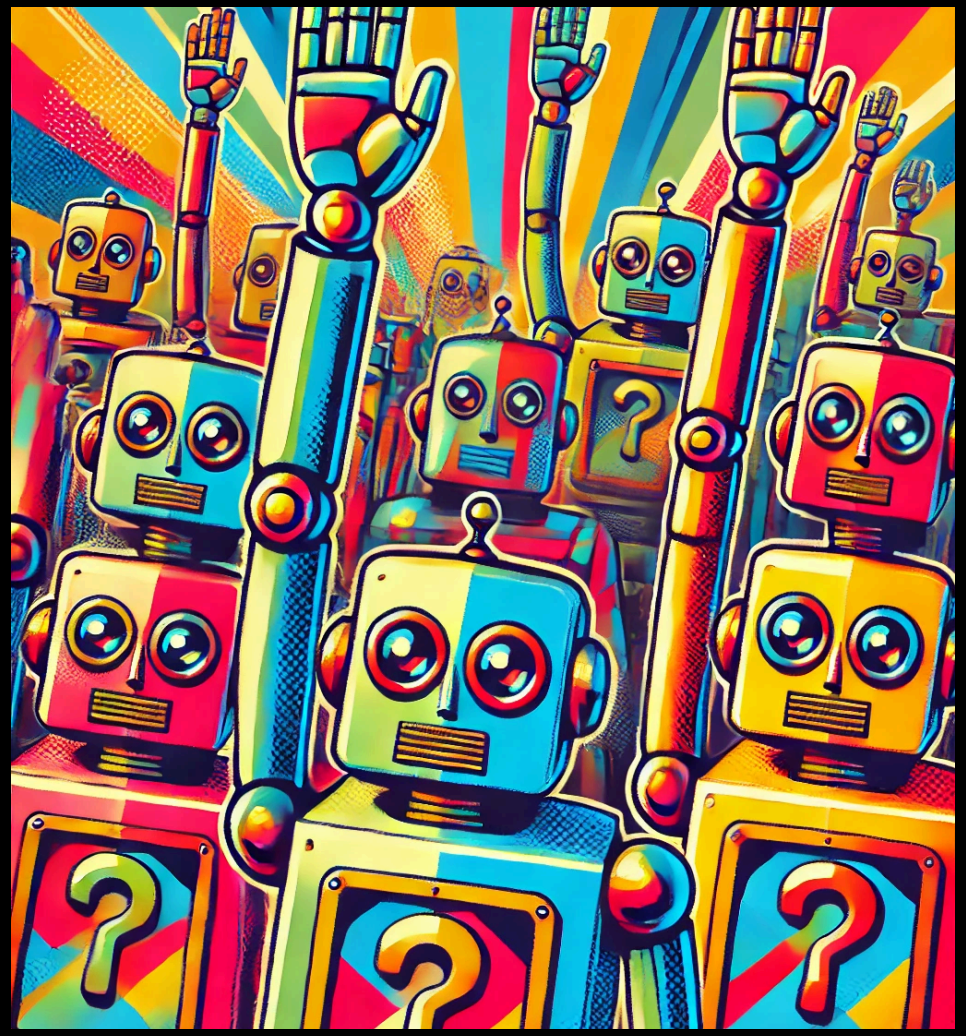
By next time you will be able to:

- Select an open source model for fine tuning
- Compare instruct and base variants for a task
- Evaluate a base model against a business objective

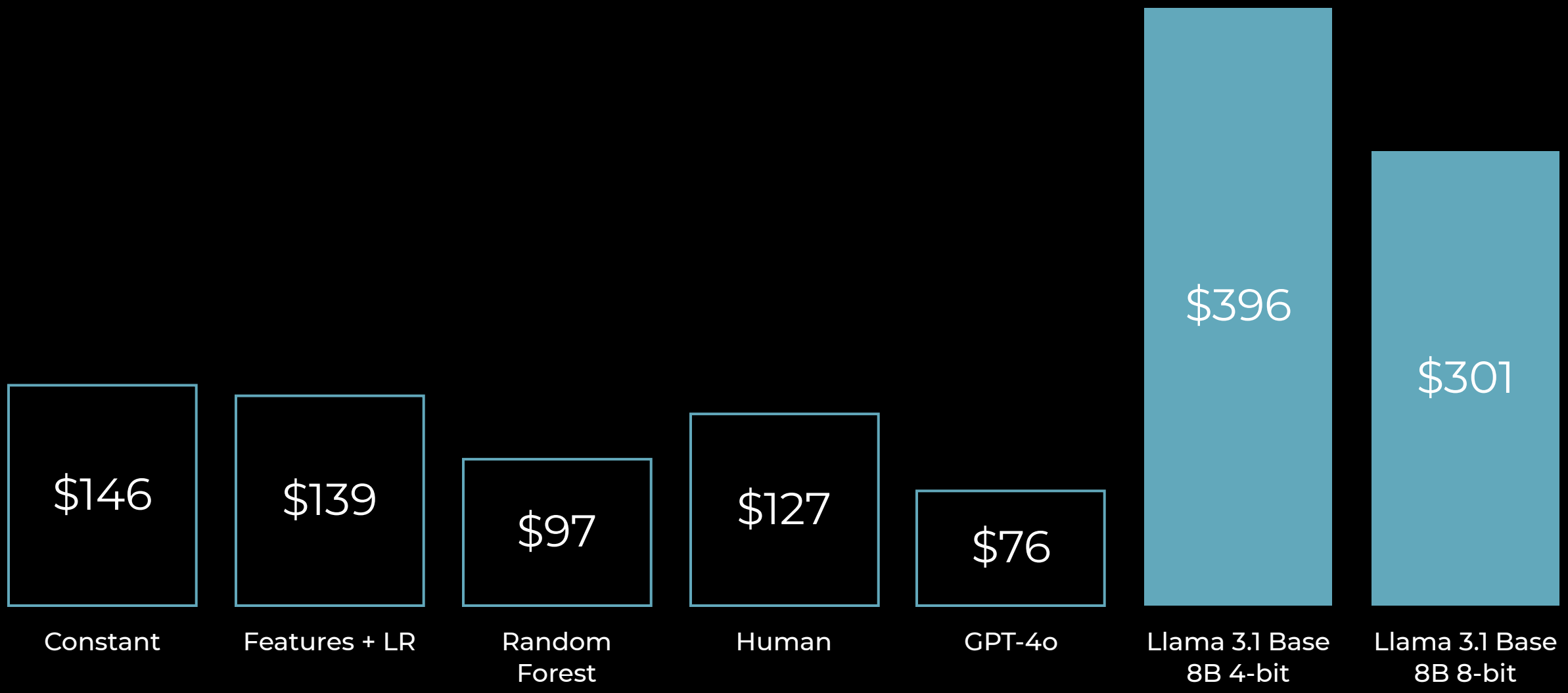
Which Model?

Decisions to select our base model

- Number of parameters
- Llama vs Qwen vs Phi vs Gemma
- Base or Instruct variants



Average prediction error from our models



PROGRESS

EIGHTY PERCENT!!

What you can now do

- Generate text and code with Frontier Models and Open Source models using APIs and HuggingFace, including tools, assistants and RAG
- Follow a 5 step strategy to solve problems, including dataset curation, making a baseline model, and fine-tuning a Frontier model
- Explain QLoRA for fine-tuning open-source models including defining target modules, r and alpha, select and evaluate a base open source model

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By next time you will be able to:

- Outline the major hyper-parameters used during training
- Set up an Supervised Fine Tuning Trainer
- Kick off training your own proprietary LLM!