

Hands-On AI

Robert Todd

In this course you will learn to use AI tools to do amazing and useful things. Each week, through lecture and demonstration, you will learn more about the rapidly growing capabilities of AI models like ChatGPT, Claude and Gemini. In the week between, you'll build your AI prowess with a series of progressively more involved and thought-provoking exercises. The goal is to expand your view of what AI can do and build your confidence in collaborating with machine intelligence.

In many ways AI is easier to use than any software tool ever invented, but to use it well requires a different way of thinking than traditional computer software. It is actually more like working with a team of infinitely patient, but naive human experts. This term's course will cover new model capabilities and increase the focus on hands-on assignments.

Class One

Intro to AI Models

- What do AI models know?
- How do AI models think?
- Getting to know the current tools

Class Two

What can an AI model make?

- Text outputs
- Media outputs
- Software outputs

Class Three

The art of the prompt

- What a prompt is and what it actually does
- The challenge of saying what you want
- Prompt structure and iteration

Class Four

Beyond text prompts

- What can you feed an AI model
- General-purpose vs. task-specific AI
- Creating your own custom AI

Class Five

AI as collaborator

- AI as Tutor
- AI as Project Manager

- AI as Confidant

Class Six

Next Horizons

- Recap and synthesis
- What's coming
- Your role in the evolution of AI