



MASTER INFO

English course

2024-2025
Class 3

DeepSeek and distillation:
Why the AI race will never be
the same, CNBC



Why the AI race will never be the same, CNBC

Open AI Says Deepseek Used IP

- 1- "This is a so significant it
And it makes the. Winners of the previous, OpenAI and Microsoft,
makes them look like, accusing DeepSeek of open AI
inputs."

- 2- "So sure [DeepSeek] copied the playbook, but it did so far more efficiently
..... open sourced it and innovated"
"You can see all of this because it's open source and published."

Why the AI race will never be the same, CNBC

Open AI Says Deepseek Used IP

- 1- "This is a **breakthrough** so significant it **redraws the battle lines**.
And it makes the. Winners of the previous **era**, OpenAI and Microsoft, makes them look like **sore losers**, accusing DeepSeek of **using** open AI inputs."

- 2- "So sure [DeepSeek] copied the playbook, but it did so far more efficiently **and then** open sourced it and innovated **on top of it**."
"You can see all of this because it's open source and published."

Why the AI race will never be the same, CNBC

Distillation and the Future of AI

3- "Accusing DeepSeek of using open AI outputs, again, this is just kind of ironic to hear it from OpenAI. the new race in one word:, a way to a big AI model into a faster, smaller one keeping what it learned."

4- "So we're going to just see. happening. it's already happening like there's so many versions of Deep Seek that have been reproduced and just in the last week."

Why the AI race will never be the same, CNBC

Distillation and the Future of AI

3- "Accusing DeepSeek of using open AI outputs, again, this is just kind of ironic to hear it from OpenAI. **To sum up** the new race in one word: **distillation**, a way to **shrink** a big AI model into a faster, smaller one **while** keeping what it learned."

4- "So we're going to just see. **distillation** happening. **Left and right** it's already happening like there's so many versions of Deep Seek that that have been reproduced and **redone** just in the last week."

DISCUSS THE FOLLOWING QUESTIONS IN PAIRS FOR A FEW MINUTES

- 1- What does it mean when the speaker says DeepSeek "copied the playbook" but did so "far more efficiently"?
- 2- What are the potential benefits of open sourcing AI models, as mentioned in the audio? Why would DeepSeek choose to make its AI models open source?
- 3- Do you agree with the idea that "distillation" will become a key factor in the future of AI? Why or why not?
- 4- To what extent do you think DeepSeek will actually change the AI industry?

Reviewing elements from last class

Linkwords recap : use once each of the following words to fill in the blanks : besides / therefore / i.e. / likewise / to summarize / e.g. / not only.... but also / due to

1. AI models, , systems designed to perform tasks that normally require human intelligence, are becoming more sophisticated every year.
2. There are many types of AI algorithms,, machine learning, natural language processing, and computer vision.
3. AI systems can analyze vast amounts of data quickly;, they are increasingly used in industries like healthcare and finance.
4. Just as AI has transformed customer service through chatbots,, it's improving manufacturing processes through automation.
5. AI adoption in healthcare is growing rapidly, its ability to analyze medical data and assist doctors in making more accurate diagnoses.
6. AI optimizes processes helps in decision-making., it can predict future trends by analyzing historical data.
8., AI has the potential to revolutionize multiple fields, from healthcare to entertainment, making tasks faster, more efficient, and more accurate.

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1. AI models, **i.e.**, systems designed to perform tasks that normally require human intelligence, are becoming more sophisticated every year.
2. There are many types of AI algorithms, **e.g.**, machine learning, natural language processing, and computer vision.
3. AI systems can analyze vast amounts of data quickly; **therefore**, they are increasingly used in industries like healthcare and finance.
4. Just as AI has transformed customer service through chatbots, **likewise**, it's improving manufacturing processes through automation.
5. AI adoption in healthcare is growing rapidly, **due to** its ability to analyze medical data and assist doctors in making more accurate diagnoses.
6. AI **not only** optimizes processes **but also** helps in decision-making. **Besides**, it can predict future trends by analyzing historical data.
8. **To summarize**, AI has the potential to revolutionize multiple fields, from healthcare to entertainment, making tasks faster, more efficient, and more accurate.

Essay Writing: How to write an introduction

1) Start with a Hook (=grab the reader's attention)

It can be question, a fact or a short anecdote

Example: « Have you ever wondered why people enjoy listening to music? »

2) Provide some background

Some context or background information. (a brief explanation of the topic). KEEP IT SIMPLE.

3) Thesis statement (= your question)

It should be clear and short. THIS is what you will be answering (= part 1 is a part of the answer, part 2 is another part of the answer)

Example: "In this essay, I will explore the benefits of listening to music and how it affects our mood and productivity."

4) Give the outline

Example: "In a first part I will discuss.... Then in a second part I will..."

Essay Writing: How to write a conclusion

1) Restate the thesis (=the question)

Don't repeat it exactly, try to say it a bit differently.

2) Summarize Main points

Briefly mention the key points from the body paragraphs. KEEP IT SHORT.

3) Final thought

Could be a suggestion, a call to action, or a reflection on the importance of the topic.

Example: "Clearly, music is more than just entertainment—it's a powerful tool for enhancing well-being and productivity."

LISTENING COMPREHENSION 2

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Who's to blame?

Discuss these three scenarios:

- **Scenario 1:** A lawyer submits a brief written by ChatGPT that contains fake case citations.
 - **Scenario 2:** A doctor uses an AI diagnostic tool that gives a false negative.
 - Scenario 3:** A researcher uses AI to summarize data and misses a major error in the output.
-
- Who should be held responsible? The professional, the AI developer, or both?
 - What could have been done differently?
-
- To conclude: to what extent is human oversight necessary? To what extent can we trust AI tools?

Listening Comprehension 2

(...) This was not good because when you _____ 1 _____ information from large language models, as they're called, they sometimes give you _____ 2 _____ and sometimes _____ 3 _____, what are called _____ 4 _____. And the _____ 5 _____ made up legal _____ 6 _____ for that document. They were offered in a _____ 7 _____ court case. The _____ 8 _____ points to a bigger question - how, if at all, should artificial intelligence influence the courts? Andrew Miller says we should begin by noticing that AI is already there.

1-	2-
3-	4-
5-	6-
7-	8-

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1- request	2- facts
3-fakery	4- hallucinations
5- chatbot	6- citations
7- real-life	8- episode

Detailed Comprehension Questions:

- 1) Why was a Colorado lawyer suspended earlier this year?**

- 2) Who is Andrew Miller?**

- 3) How does Andrew Miller describe the historical use of artificial intelligence in law before the prevalence of AI tools like ChatGPT?**

Detailed Comprehension Questions:

1) Why was a Colorado lawyer suspended earlier this year?

for using ChatGPT to draft a legal document with made-up legal citations.

2) Who is Andrew Miller?

a lecturer & director of the Yale Law School Center for Private Law

3) How does Andrew Miller describe the historical use of artificial intelligence in law before the prevalence of AI tools like ChatGPT?

reliance on electronic archives

Detailed Comprehension Questions:

- 4) What role does AI play at the front end of the legal research process, according to Andrew Miller?**

- 5) What concerns does Miller express regarding lawyers using AI tools like ChatGPT to draft legal briefs?**

- 6) How does Miller compare a lawyer using AI to a doctor using an MRI machine?**

Detailed Comprehension Questions:

4) What role does AI play at the front end of the legal research process, according to Andrew Miller?

assisting lawyers in gathering facts and canvassing the law.

5) What concerns does Miller express regarding lawyers using AI tools like ChatGPT to draft legal briefs?

- lawyers delegating their duties when using AI tools for legal briefs
- lawyers have the ethical duty to provide competent legal representation.

6) How does Miller compare a lawyer using AI to a doctor using an MRI machine?

Unlike a doctor with an MRI, lawyers using AI lack a well-developed understanding of how inputs relate to outputs.

Detailed Comprehension Questions:

- 7) What is the main challenge Miller highlights in using large language models like ChatGPT in the legal profession?**

- 8) How have federal courts in the United States responded to the use of AI technologies in legal practices?**

- 9) What does Miller suggest about the potential risks associated with using AI in the legal field?**

Detailed Comprehension Questions:

7) What is the main challenge Miller highlights in using large language models like ChatGPT in the legal profession?

the lack of a well-developed understanding of how inputs relate to outputs

8) How have federal courts in the United States responded to the use of AI technologies in legal practices?

The courts issue local rules. Some of them require disclosure when you use these technologies, others simply reiterate that the existing ethical standards still apply.

9) What does Miller suggest about the potential risks associated with using AI in the legal field?

AI could lead to unjust outcomes (potentially putting someone in jail who doesn't belong there or causing someone to lose a case they should have won)

Detailed Comprehension Questions:

- 10) In Miller's view, what is the similarity between the risk associated with AI and the risk of lawyers not supervising their underlings properly?**

- 11) How does Miller express his feelings about the future impact of AI on the legal profession?**

Detailed Comprehension Questions:

10) In Miller's view, what is the similarity between the risk associated with AI and the risk of lawyers not supervising their underlings properly?

the potential to do their job badly, resulting in risks to their clients

11) How does Miller express his feelings about the future impact of AI on the legal profession?

Cautious optimism about the potential and risks

+ need for serious vigilance in its development.

12- Fill in the blanks with appropriate vocabulary items:

"To what extent does someone have to think about what a large language model produces? I'm thinking about the way that we as consumers are _____ 1 _____ given these terms of service that we're _____ 2 _____ going to read and _____ 3 _____ I accept, and of course, we _____ 4 _____ at it and click I accept. You have to do something more than that as a lawyer, don't you?

MILLER: You're exactly right. A professor colleague said to me, you know, when a doctor uses an _____ 5 _____ machine, the doctor doesn't _____ 6 _____ know every technical detail of the _____ 7 _____ machine, right? And my _____ 8 _____ was, well, that's true, but the doctor knows enough about how the MRI works to have a sense of the _____ 9 _____ of things that would be picked up on an MRI, the sorts of things that wouldn't be picked up. With ChatGPT, we don't have - at least not yet - particularly _____ 10 _____ understanding of how our _____ 11 _____ relate to the _____ 12 _____.

1.	2.	3.
4.	5.	6.
7.	8.	9.
10.	11.	12.

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1. continually	2. supposedly	3. click
4. glance	5. MRI	6. necessarily
7. MRI	8. response	9. sorts
10. Well-developed	11. inputs	12. inputs

Collaborative writing – Code of Ethics for AI Users

After listening to the document, work together to create a professional Code of Ethics for AI Users.

You will:

- 1- discuss and brainstorm rules in small groups
- 2- share your ideas with the whole class
- 3- draft collaboratively in a shared document, reusing key vocab seen so far, to make a common code of ethics

Collaborative writing – Code of Ethics for AI Users

1- discuss and brainstorm rules in small groups

Discuss and make a list of rules or principles AI users should follow (in a professional context)

Use ideas from the document and your own experiences.

Just take notes, no full sentences please.

Hint: think about what professionals should do BEFORE, WHILE and AFTER using AI tools.