

GENERATIVE AI— THREE YEARS ON



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10.08.2025

2023



OpenAI 
@OpenAI



Try talking with ChatGPT, our new AI system which is optimized for dialogue. Your feedback will help us improve it.



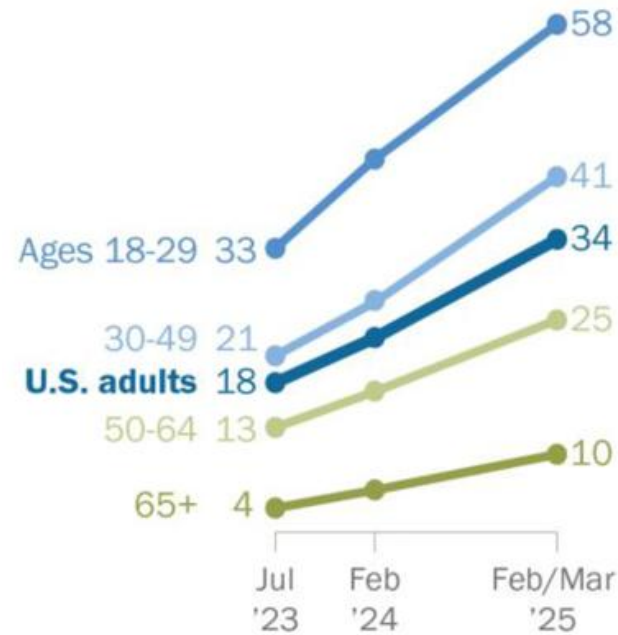
From openai.com

7:02 PM · Nov 30, 2022



ChatGPT use continues to rise; a majority of adults under 30 have used it

% of U.S. adults who say they have ever used ChatGPT



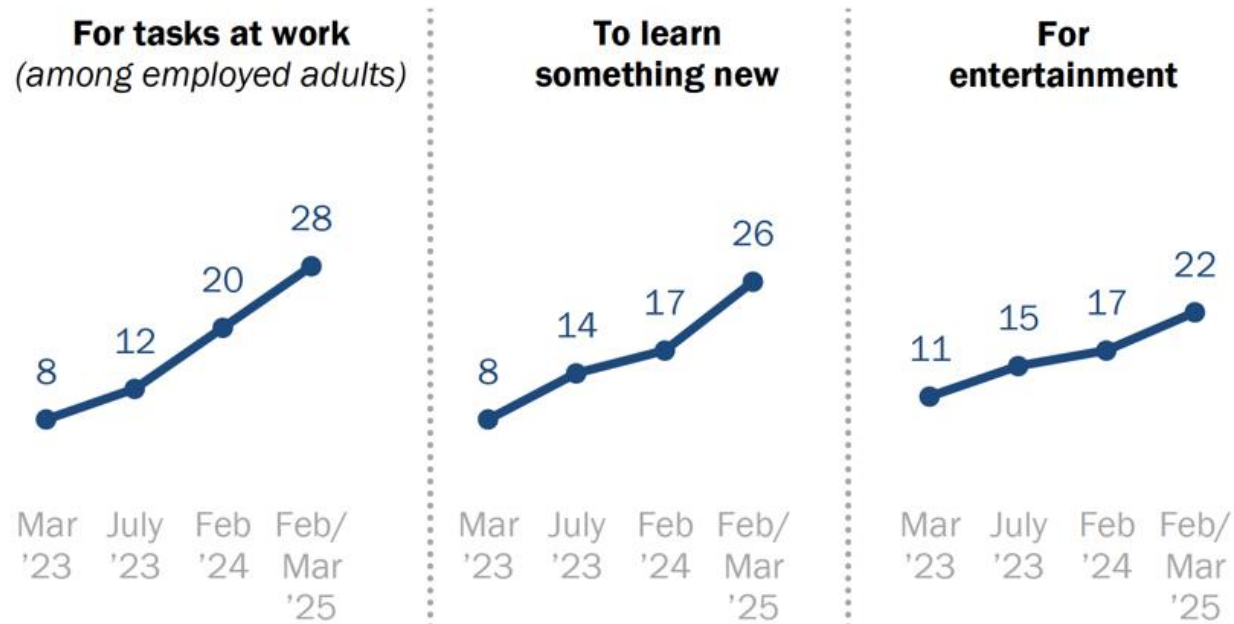
Note: Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted Feb. 24-March 2, 2025.

PEW RESEARCH CENTER

The share of U.S. workers who use ChatGPT for work has grown from 8% in early 2023 to 28% today

% of U.S. adults who say they have ever used ChatGPT ...



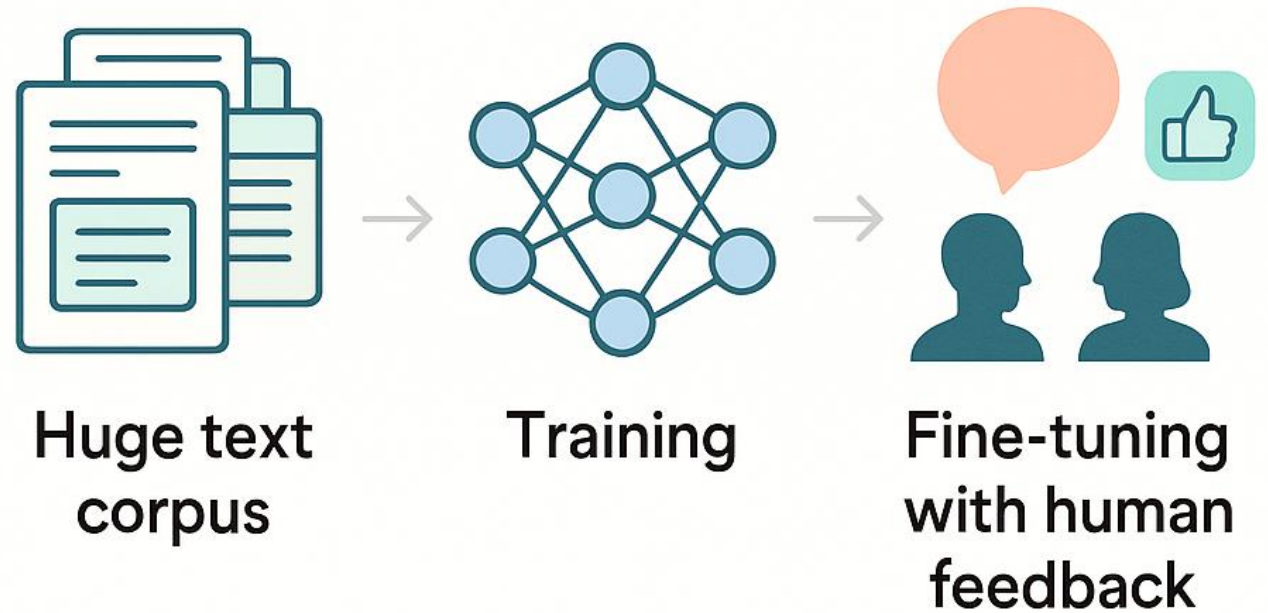
Note: "Employed" refers to those working full or part time for pay at the time of the survey. Those who did not give an answer are not shown.

Source: Survey of U.S. adults conducted Feb. 24-March 2, 2025.

PEW RESEARCH CENTER

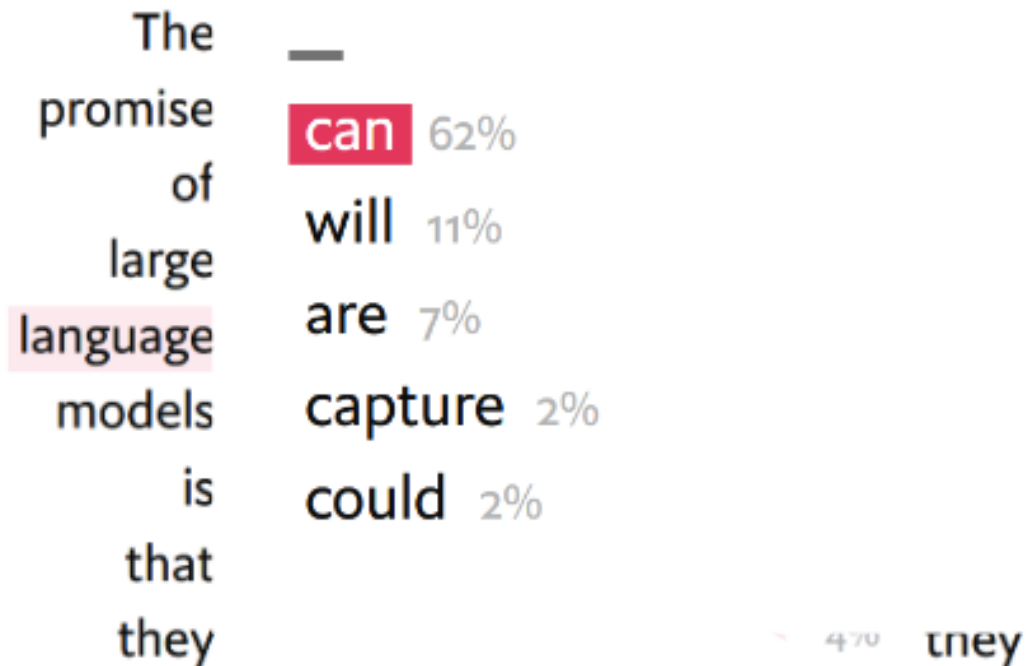
LLMs learn patterns in language by processing a huge, anonymized collection of books, websites, and other text.

Engineers then fine-tuned them, rewarding helpful answers and discouraging harmful ones, so the LLMs follow instructions safely.



Large language models – behind the scene

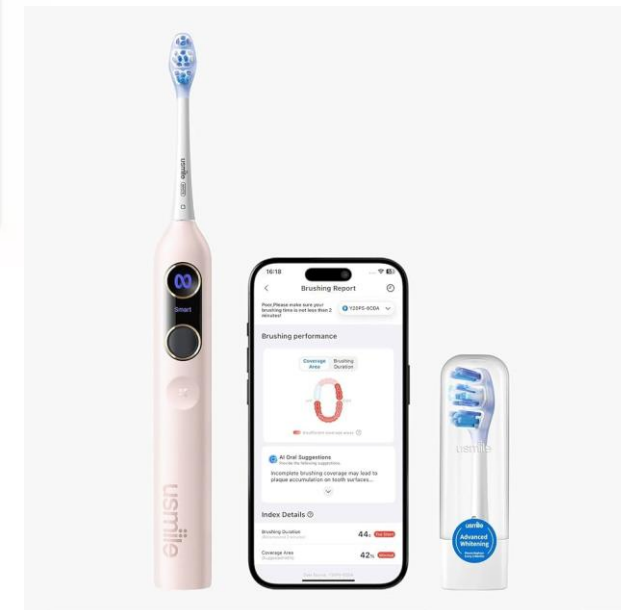
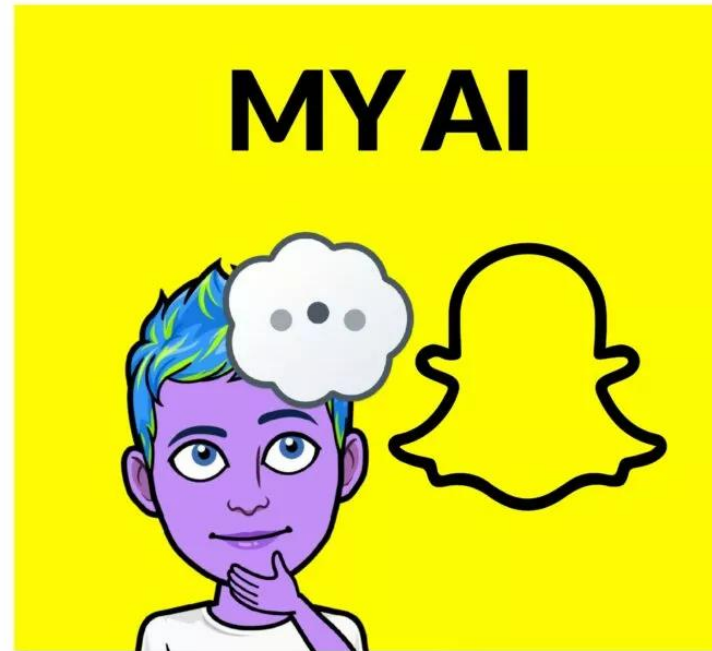
The promise of large language models is that they





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Reference your files	Real-time monitoring
Use AI in the apps you use every day	Private and secure
Multi-modal	Gaining personal insights



General Data Protection Regulation

GDPR

Chat settings

Customize the chat experience



Model

Select the model you want

GPT-4-Turbo ▾



Temperature: 0.2

Controls creativity of model



Tokens: 1024

Controls answer length



System prompt

Instructions to the model

LOAD DEFAULT

You are a helpful ai assistant, respond using markdown.

Chat.uit.no

OpenAI's GPT-5 model

GDPR-compliant

Green, yellow, red data

Data is not used for LLM training

Open or freely available (Green)

Information that *may* or *should* be available to the general public, with no special access restrictions.

Most of the information managed by the university is open, either because of the general objective of the university as such, or because the law or other official regulations dictates that the information should be open. Other parts of the information does not need special protection even though it is not openly available.

This class is to be used if the university or its partners are not subject to any harm if the information is exposed to third parties.

Examples are

- a webpage presenting a department or a class, published openly on the internet.
- material for a course which is openly published, but marked with a certain license and/or copyright.
- research data that does not need any protection (the researcher is responsible for this assessment)
- teaching material that does not need any protection (the teacher is responsible for this assessment)

Restricted (Yellow)

This is basically information which is not open for everyone. There are no laws or regulations saying that the information should be open. This is all information which is not classified as «open», «in confidence» or «strictly in confidence».

The information needs a certain protection, and may be accessible to people both within and outside the university, provided that the access is limited and controlled per user. This class is to be used if the university or its partners may be subject to limited harm if the information is exposed to third parties.

The information only has relevance for, or is focused on, a limited set of users, either within the university or with other institutions or organizations that we cooperate with.

Examples may be

- certain work documents
- information which is to be kept from the public
- many types of personal data
- grades
- work by students
- examination answers
- unpublished research data and corresponding works

In confidence (Red):

This is information which the university is obliged to protect by law, agreements and other regulations. This corresponds to the information class «In confidence» in the official Norwegian instructions for information protection. «In confidence» is used if the university, its partners, public interests, or individuals, may be subject to harm if the information is exposed to third parties.

Examples may be

- certain types of sensitive personal data
- personnel files
- certain information about for example protection and safety of buildings and IT systems
- information about a person's health

Strictly in confidence (Black):

This category encompasses the same type of information as «In confidence (red)», but where special circumstances makes it necessary to protect the information even more. Demands on protection and safety are to be written down in agreements or other written documentation.

This corresponds to the information class «Strictly in confidence» in the official Norwegian instructions for information protection. «Strictly in confidence» is used if the university, its partners, public interest, or individuals, may be subject to *considerable* harm if the information is exposed to third parties.

Placement of data and information in this category should be done in cooperation with the lawyers at USIT and the IT security manager.

Examples may be

- large amounts of sensitive personal data
- large amounts of data about people's health
- research data and datasets of huge economic value

What is prompt engineering?

Prompt engineering involves making specific and effective instructions or queries to provoke accurate and relevant responses from large language models.

It is the skill of formulating prompts in a way that maximizes the utility of language models for academic writing tasks.

Quick cheat-sheet for novices

- 1.Role** – Tell the model who it is (“Act as UiT’s expert in ...”)
- 2.Audience & purpose** – Who will read it, why.
- 3.Key facts** – Dates, numbers, names.
- 4.Tone & length** – Friendly? Formal? Word limit?
- 5.Output format** – Email, table, checklist, bullets, etc.

“Bad” prompt (vague & underspecified)

“Summarize these meeting notes.”

“Good” prompt (specific, contextual, instructive)

“Read the notes below from yesterday’s Faculty Administration meeting. Output a bullet list of *action items* with:

1) *owner* (name or unit),

2) *deadline* (DD MM YYYY),

3) *one-line description*. Ignore discussion chatter.

If an action lacks a deadline, flag it ‘TBD’. Finish with a one-sentence recap of unresolved issues. — *[insert raw notes]*”

“How useful are employee work environment and climate surveys?”

VS.

“What does existing research say about the usefulness of employee work environment and climate surveys (arbeidsmiljø- og klimaundersøkelsen) in identifying workplace issues and improving organizational effectiveness in higher education institutions? Use tables when necessary for clarity.”

Summarizing a text

“Act as an executive briefing assistant. Read the attached document.

Produce a summary with the following structure and limits:

Purpose: one sentence (≤ 25 words) explaining why the document exists.

Key points: 3–5 bullet points, each ≤ 20 words.

Decisions / actions: bullet list of any tasks, owners and deadlines you detect; write “—” if none.

Open questions / risks: up to 3 bullets; write “—” if none.

Use plain English (B2 level), no jargon, no copy-pasted phrases.

Do not add commentary, only the four sections above.”

Working with documents and generating
new documents

Surveys

“You work at the administration at this faculty. You are tasked to make a comprehensive and detailed survey in Norwegian for administration that would identify opportunities for process improvement and digital support.”

Summarizing survey responses

“I have collected responses from a faculty administrative staff survey on a topic [insert the topic] that includes both closed-ended and open-ended questions.

Please:

1. Summarize the key trends from the closed-ended questions (e.g., Likert scale, multiple choice).
2. Identify recurring themes, concerns, or suggestions from the open-ended responses.
3. Highlight any contradictions or interesting patterns.
4. Provide a brief summary that can be used in a report or meeting presentation.

Here are the responses:

[Paste your data here or upload a table/text if using file mode]”

Summarizing survey responses

“Write the summary in Norwegian, using language suitable for a department leader/10 years old.”

Språkvask

“Correct grammar and give suggestions on how the language can be improved. Extract the sentences that you think need improvement and suggest me on how they can be rewritten. When rewriting, keep the formal tone, do not use superfluous words, and avoid using adjectives unless necessary”.

Språkvask - general

“Goal

Improve the clarity, grammar, and tone of the text to make it professional and suitable for university administration.

Return Format

Return only the edited version of the text. Keep structure and meaning intact.

Warnings

Do not remove important content. Avoid over-formalizing to the point of sounding robotic.

Context Dump

We are preparing an internal report/email/document related to university operations. The audience includes both academic and administrative staff. Here is the text to edit:

[Paste the text here]”

Språkvask – editing a strategy or policy draft

“Goal

Refine the text to make it sound clear, formal, and consistent with university-level strategic or policy documents.

Return Format

Return the improved version of the text. Preserve structure, section headings, and original meaning.

Warnings

Avoid vague statements. Do not introduce new content unless it improves clarity or flow.

Context Dump

This is a draft of a faculty-level strategy/policy document. It may be shared with academic staff, leadership, and external stakeholders. The tone should be professional and authoritative.

Here is the draft text:
[Paste the text here]”

Språkvask – translation and tone adjustment

“Goal

Translate the text from Norwegian to English (or vice versa), and adjust the tone to be clear, respectful, and appropriate for university communication.

Return Format

Return only the translated version with improved fluency and tone. Preserve structure and meaning.

Warnings

Do not add or omit information. Avoid overly literal translations—focus on natural, professional language.

Context Dump

This message will be shared with students or staff and must be understandable across cultures and roles. It may concern a deadline, policy update, or meeting invitation.

Here is the original text:
[Paste the text here]”

General feedback

You're an experienced editor. Please review my draft and give concise, high-impact feedback under the five headings below.

1. **Quick verdict (1-2 sentences)**

- Overall impression and the single most important fix.

2. **Top strengths (3 bullets max)**

- What already works—keep it brief.

3. **Priority fixes (3–5 bullets)**

- Biggest changes that will most improve clarity, persuasiveness, or flow.

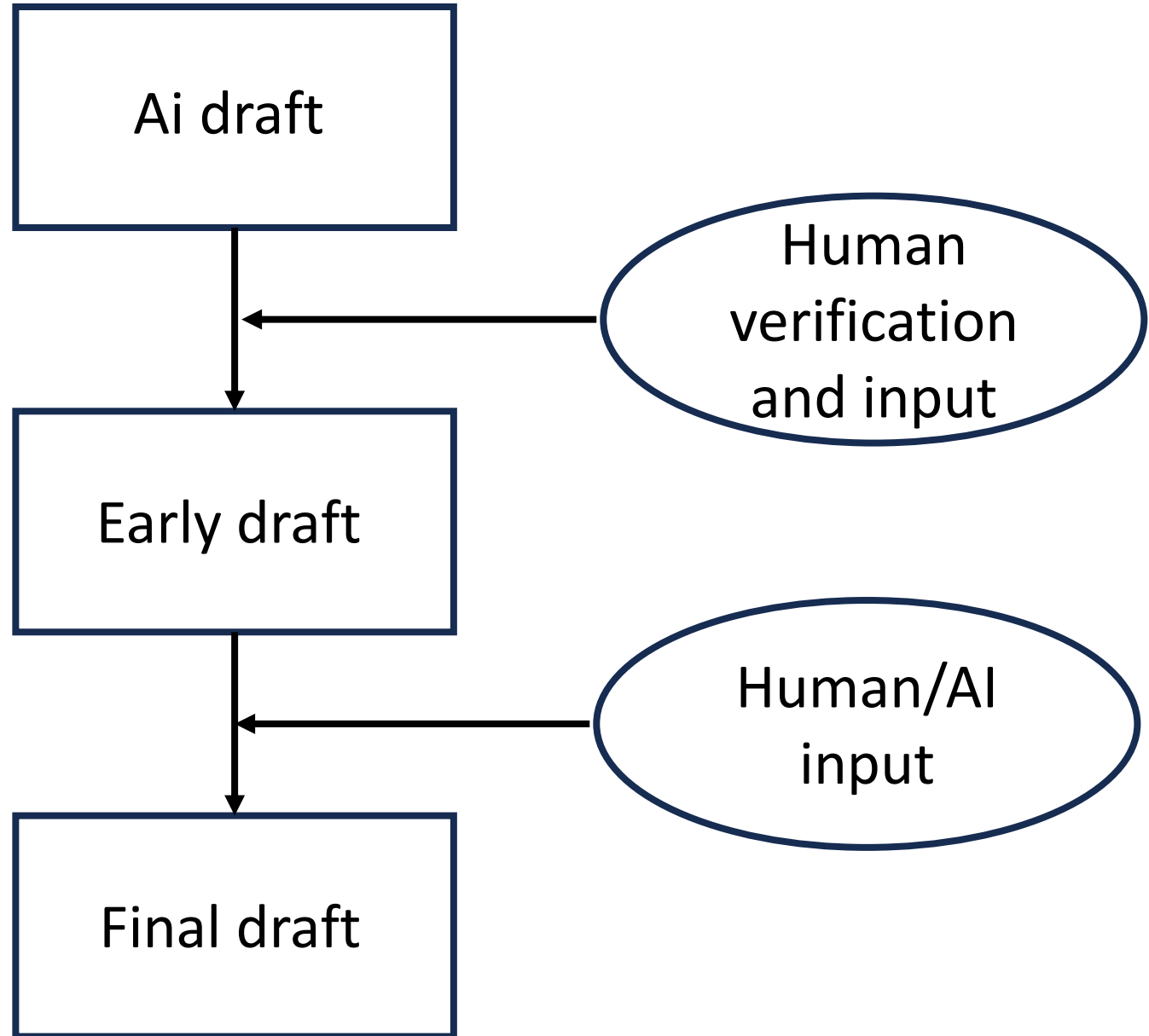
4. **Specific trouble spots**

- Quote any sentences/sections that confuse you and suggest a better version.

5. **Mechanical notes**

- Only flag recurring grammar, style, or formatting issues (skip one-off typos).

Keep it to ~300 words total.



Data analysis with LLMs?



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Computer science graduates struggle to secure their first jobs

22 August 2025

Share  Save 

Joe Fay Technology Reporter

“A report by the UK's National Foundation for Education Research [showed a 50% decline](#) in tech job adverts between 2019/20 and 2024/25, with entry level roles particularly affected.”

<https://www.bbc.com/news/articles/cm21dvg8l1go>

Image generation with ChatGPT

"Create a scenic image of a university campus located in northern Norway. Include modern buildings with glass and steel architecture surrounded by a snowy landscape, with dramatic mountains in the background and the faint glow of the northern lights in the night sky. Add a few students walking in warm winter clothing, and a small fjord or icy water feature nearby to reflect the arctic environment. The overall mood should be serene and majestic, capturing the unique beauty of the northern Norwegian setting"



Data Safety



Verification



Transparency

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Hallucinations...



~~Background:~~ The rapid evolution of Large Language Models (LLMs) has led to a surge in their potential applications across various sectors in Europe. This paper presents three orthogonal use-cases from the AI4Europe project, ~~demonstrating the spectrum of LLM usage in contexts involving fine-tuned models, private data embedded into a model, and prompt engineering.~~ private data, authoritative sources, and public information.¶

~~Methods:~~ We considered three distinct scenarios: (1) Medical researchers requiring local LLM ~~installation~~ training due to data protection policies, (2) The Norwegian Directorate for Higher Education and Skills aiming to use LLMs for authoritative education-related queries, and (3) The Workability startup leveraging LLMs to develop technology to assist employers in proactive sick-leave management.

~~Findings:~~ For the medical sector, we found that on-premises LLM training, ~~differential privacy, and federated learning~~ offers promising pathways to balance data privacy with research needs. For the Norwegian Directorate, ~~embedding their data~~ custom knowledge integration with the LLM ~~enables, stringent access controls, and real-time data updates~~ are crucial to ensure accurate and authoritative responses. Meanwhile, for ~~public data~~ scenarios like Workability, the primary challenge lies in ~~customizing the conversation using prompt engineering~~ fine-tuning LLMs for domain-specific knowledge without the constraints of data privacy.

~~Conclusion:~~ As LLMs continue to transform diverse sectors, a tailored approach to their deployment, grounded in the specific data and privacy needs of the sector, is paramount. AI4Europe's exploration across these three use-cases offers valuable insights and strategies for effective LLM application in varied contexts.

Kommune tatt for KI-bruk: – Dette er pinlig

Tromsø kommune brukte kunstig intelligens som hjelpemiddel i arbeidet med en viktig rapport. Rapporten inneholdt flere feil, noe KI-ekspert mener kunne vært unngått.

As more fake citations emerge in the 'MAHA' report, White House struggles with a defense

To describe references to nonexistent scientific research as “some formatting issues” is like saying the Titanic confronted “some evening issues.”



May 30, 2025, 2:52 PM GMT+2

By Steve Benen

<https://www.msnbc.com/rachel-maddow-show/maddowblog/fake-citations-emerge-maha-report-house-struggles-defense-rcna209915>

Bias in LLMs

Large language models can inherit biases from their training data, affecting gender, race, and culture.

Bias in LLMs can reinforce stereotypes, cause discrimination, spread misinformation, and erode public trust.

«Draw me an image of a doctor and
a nurse»

draw me an image of a doctor and a nurse



Here is the image of a doctor and a nurse standing side by side in a hospital setting. Let me know if you'd like any adjustments or more details added! ↓

make them less physically attractive



Here is the updated image of a doctor and a nurse with more average, everyday physical features.

Let me know if you'd like any further adjustments ↓

“Draw me an image of a group of successful business professionals in a modern office building, collaborating on a project.”



Image created with 4o image generation model

LLMs as a source of information?

Information literacy is not a luxury – it is a **fundamental prerequisite** for a functional knowledge society in the 21st century.

Disclosure example:

“In this work, I have used Generative AI tools to revise wording throughout the production of the text. ChatUiT, during several time periods, was used, using the underlying GPT-4o Large Language Model. I reviewed, edited, and take responsibility for all outputs of the tools used in this work.”

Erosion of critical thinking and analytical skills

Over-reliance on AI for problem-solving, analysis, or even writing can lead to skill degradation.

Human vs. machine 

Human with a machine 

Ai policy



Infrastructure



Training

Take home messages

- Bruk KI!
- Vær ansvarlig!
- Avklar forventningene dine.
- Øv på prompt-teknikk.
- Stol på, men verifiser!
- Ha det gøy!