



AI & RESPONSIBLE AI

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Erasmus+ Cooperation partnerships in higher education, 2024-1-PL01-KA220-HED-000250324, WP3. Skills and competencies development



WHAT IS AI?

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Why Are We Talking About AI?

AI is already part of our daily lives.



Education



Work



Social Media



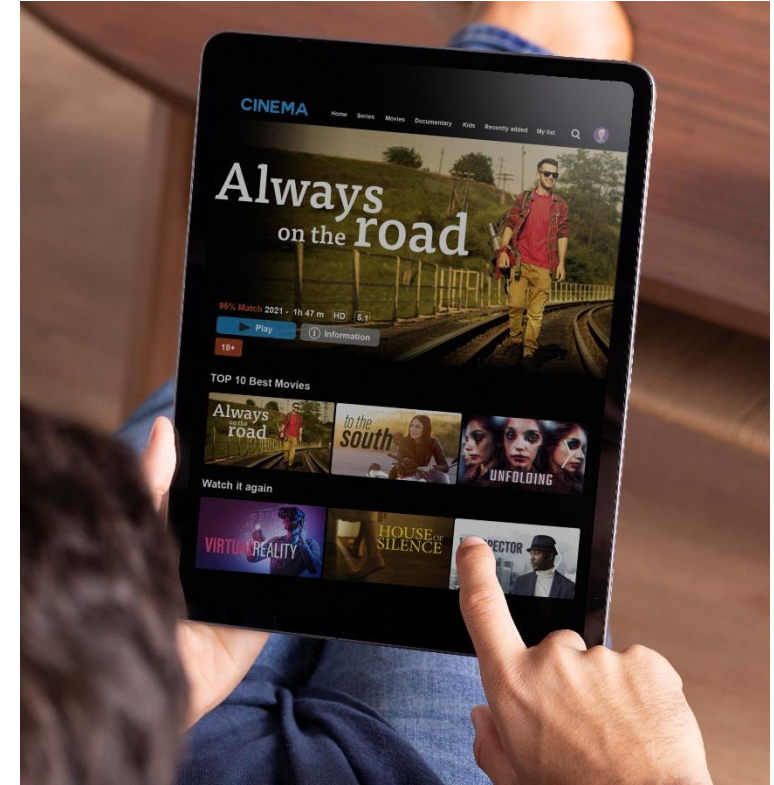
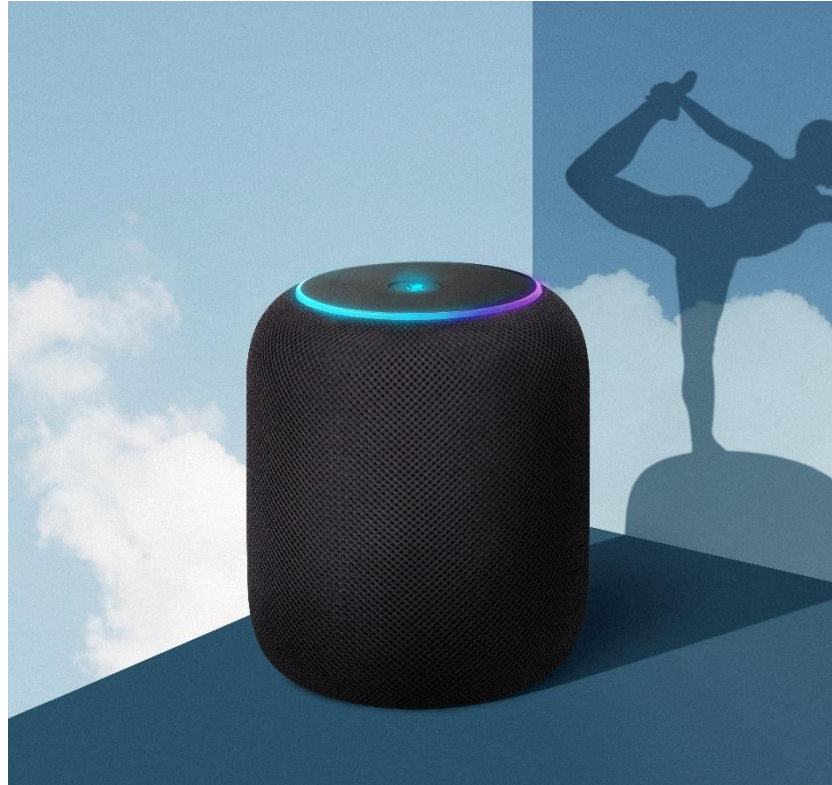
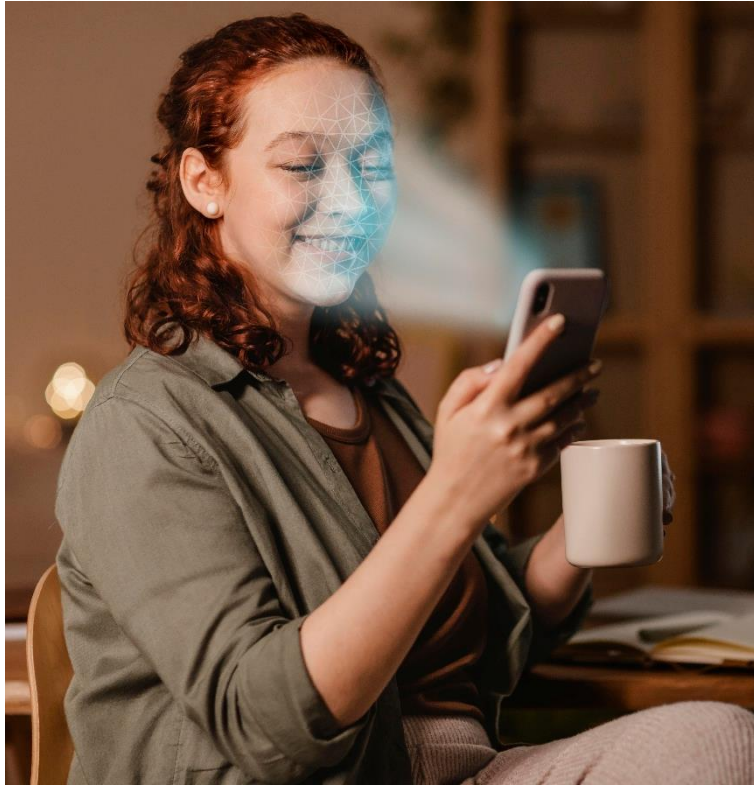
Decisions



- ✓ AI is not only a technical issue
- ✓ It is a societal issue



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AI Defines Your Reality

Artificial Intelligence is not a futuristic promise—it's the invisible infrastructure of today. You interact with it daily, often without noticing.

Insight:

AI is not just a technical topic—it's a societal issue impacting education, work, and democracy itself.

Recommendation Systems

Decides what you consume

Evaluation Tools

Automates academic assessments

Content Moderation

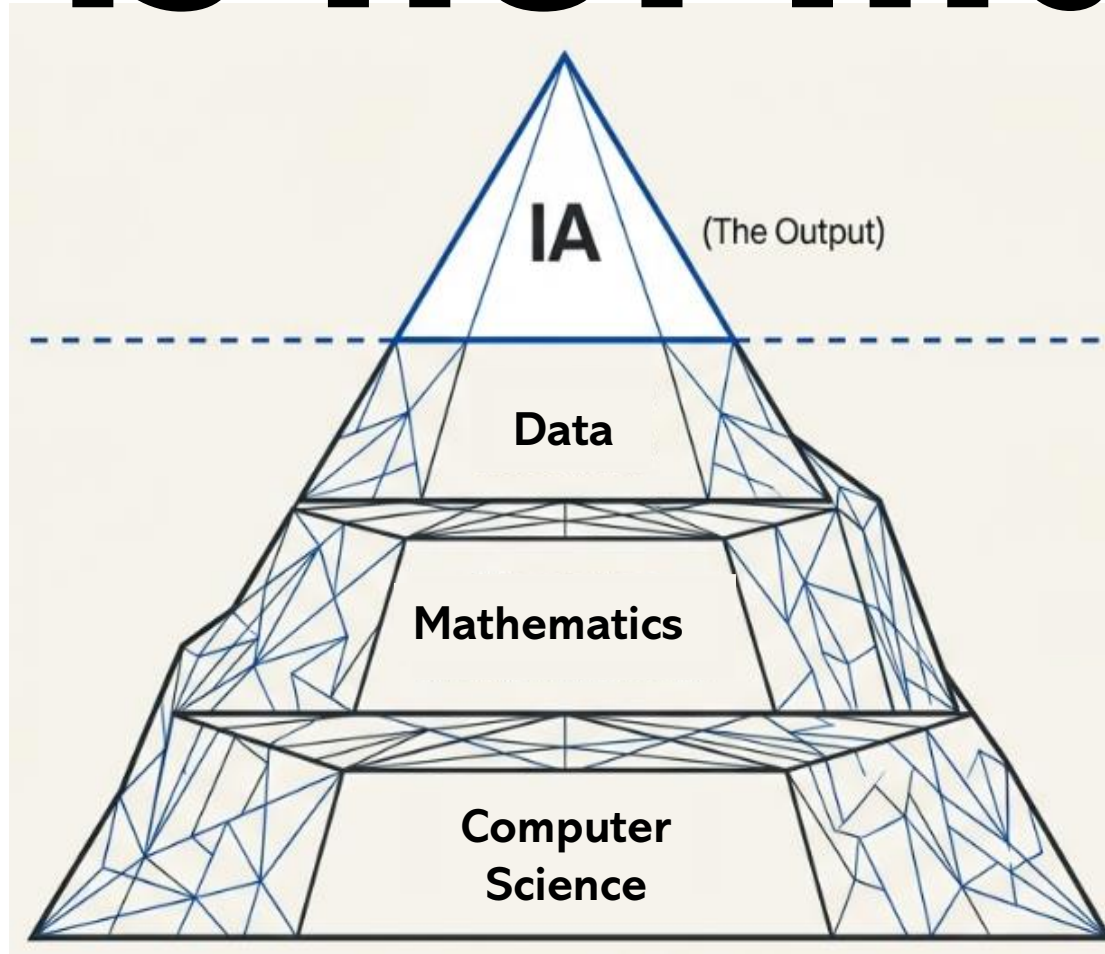
Filters public discourse

Generative AI

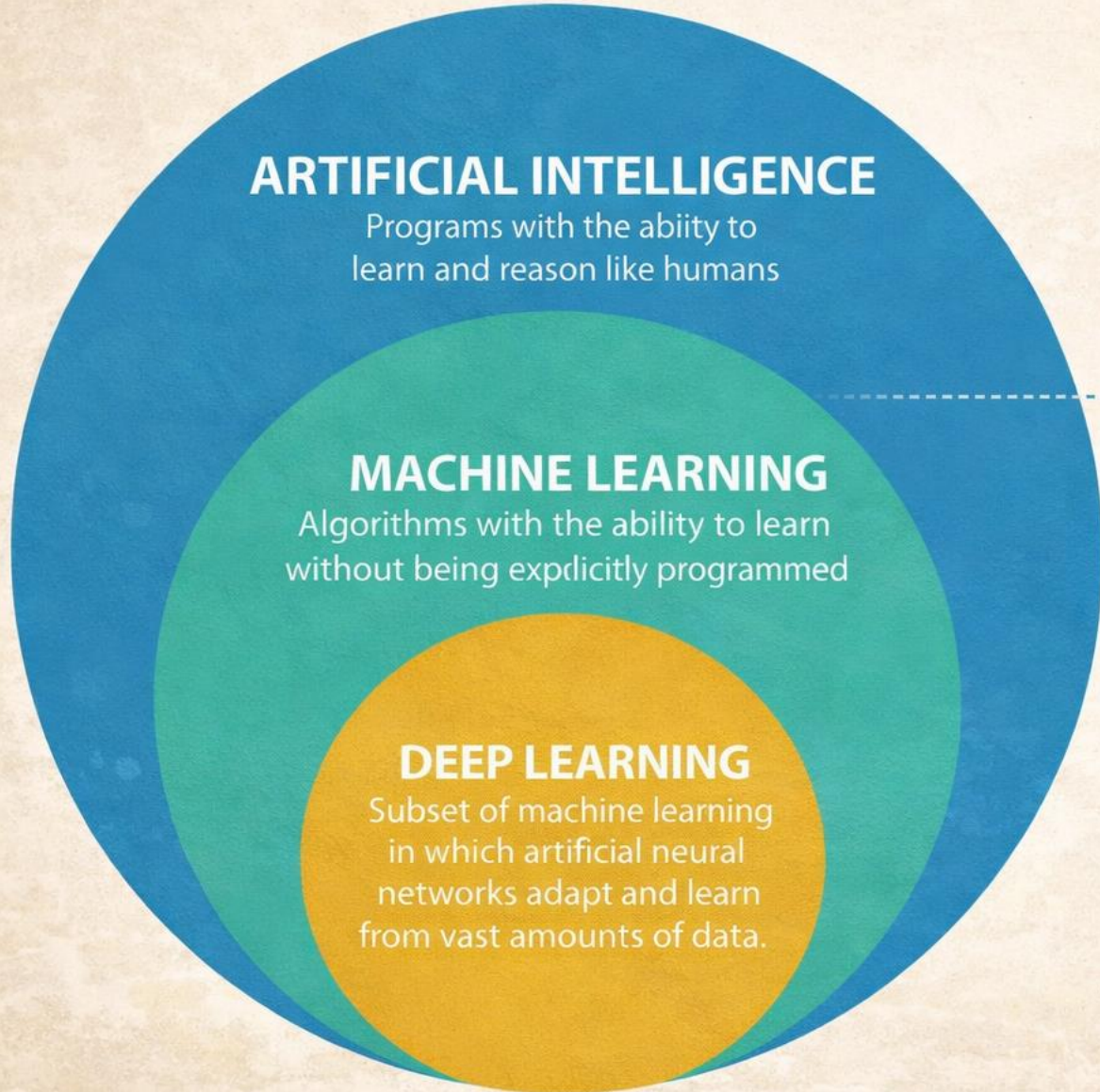
Redefines what is created

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AI is not magic



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Other AI Applications



Expert Systems



Rule-based Systems



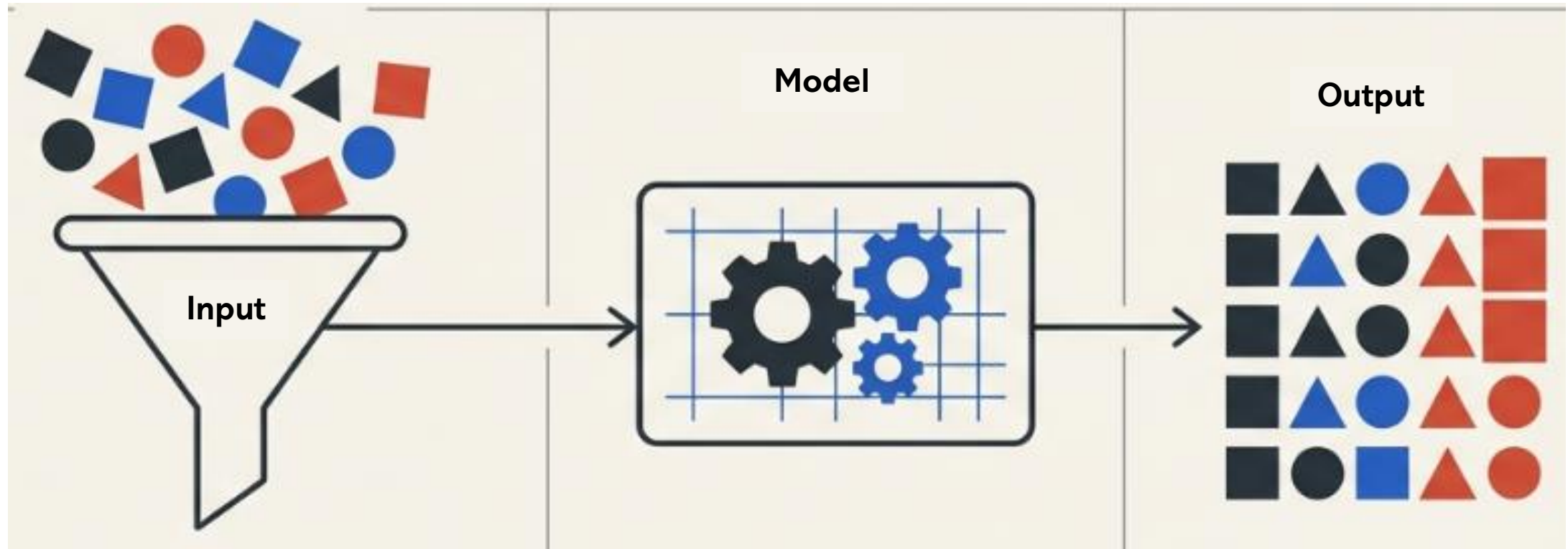
Robotics



Natural Language Processing

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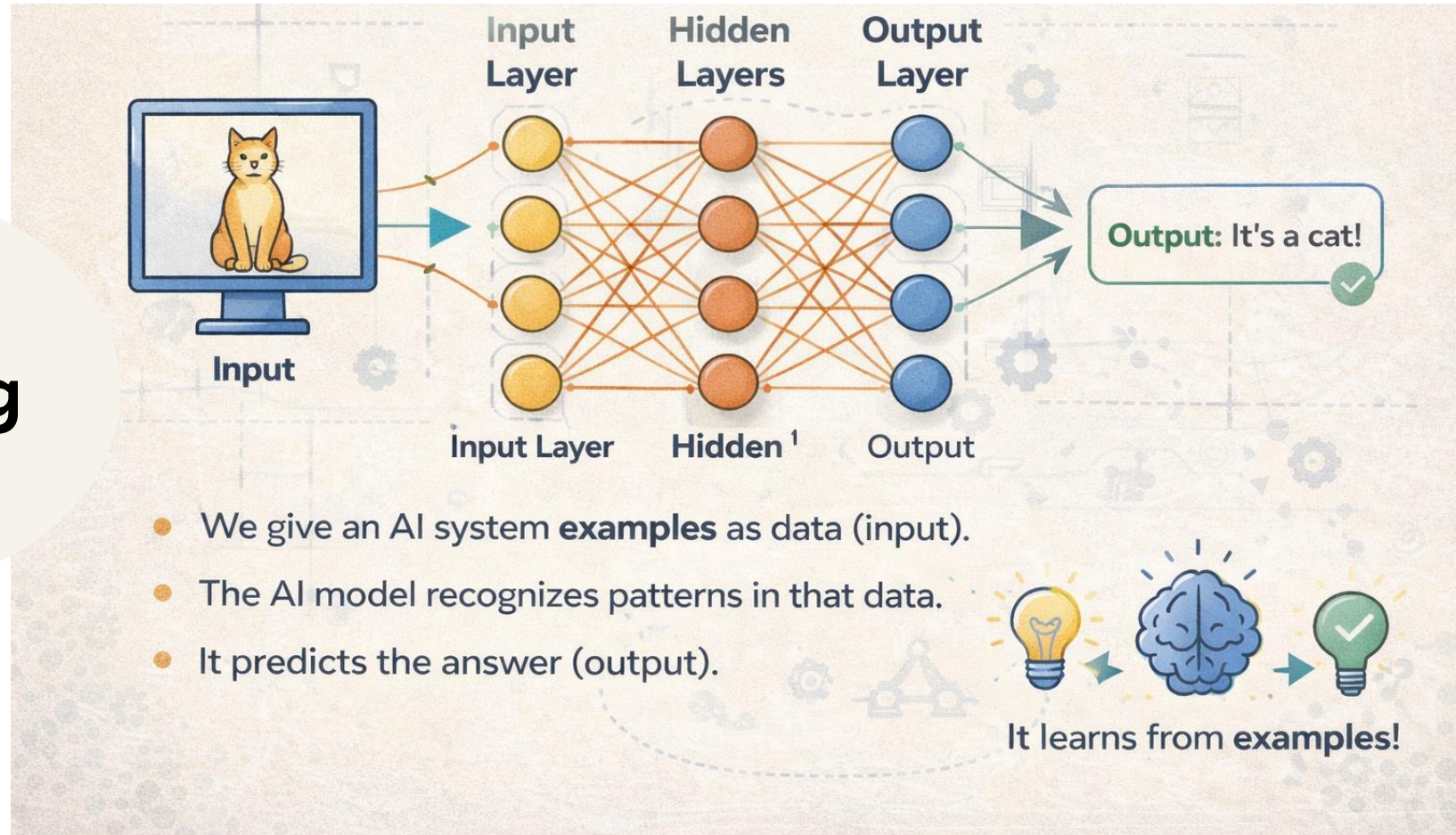
How does it work?



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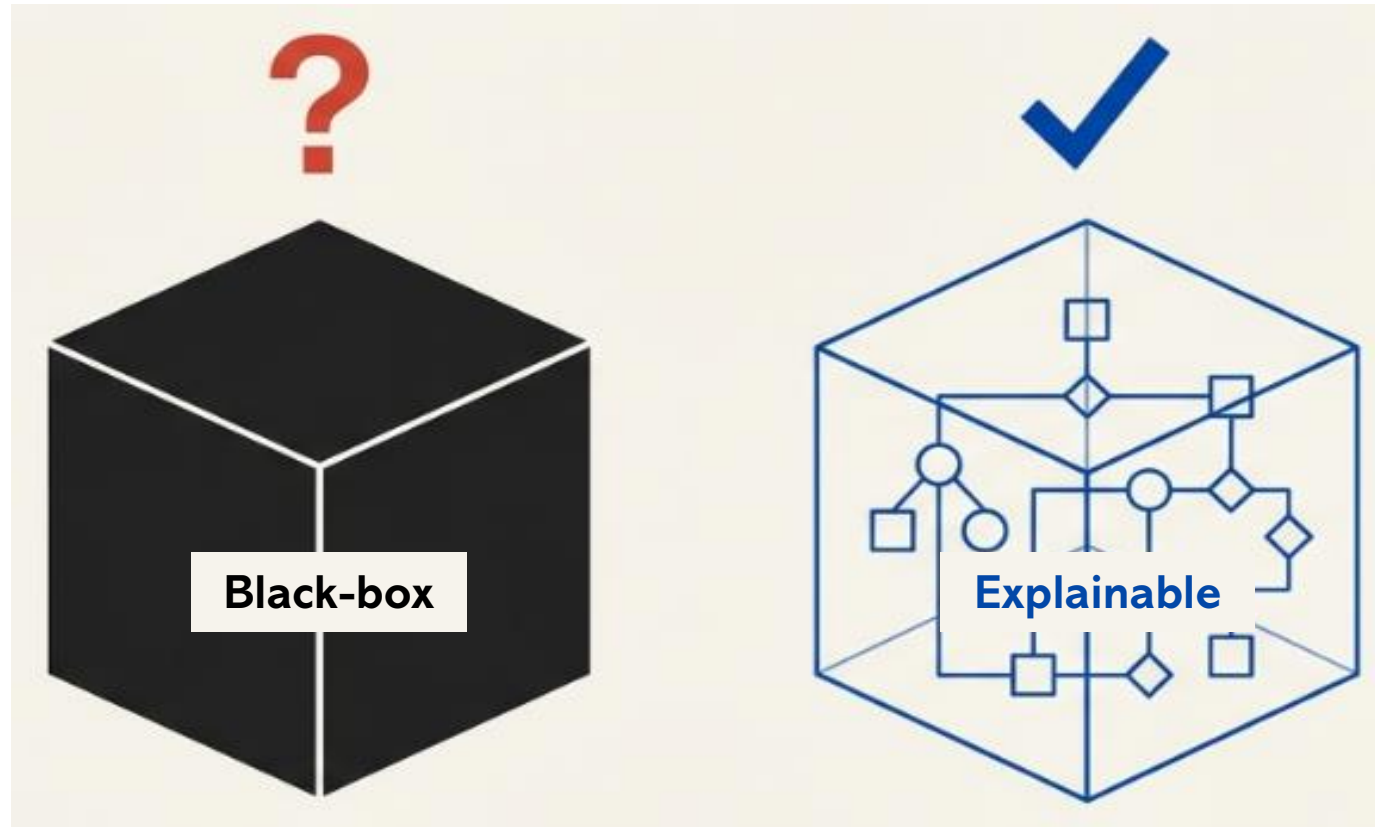
How does it work?

Deep Learning Model

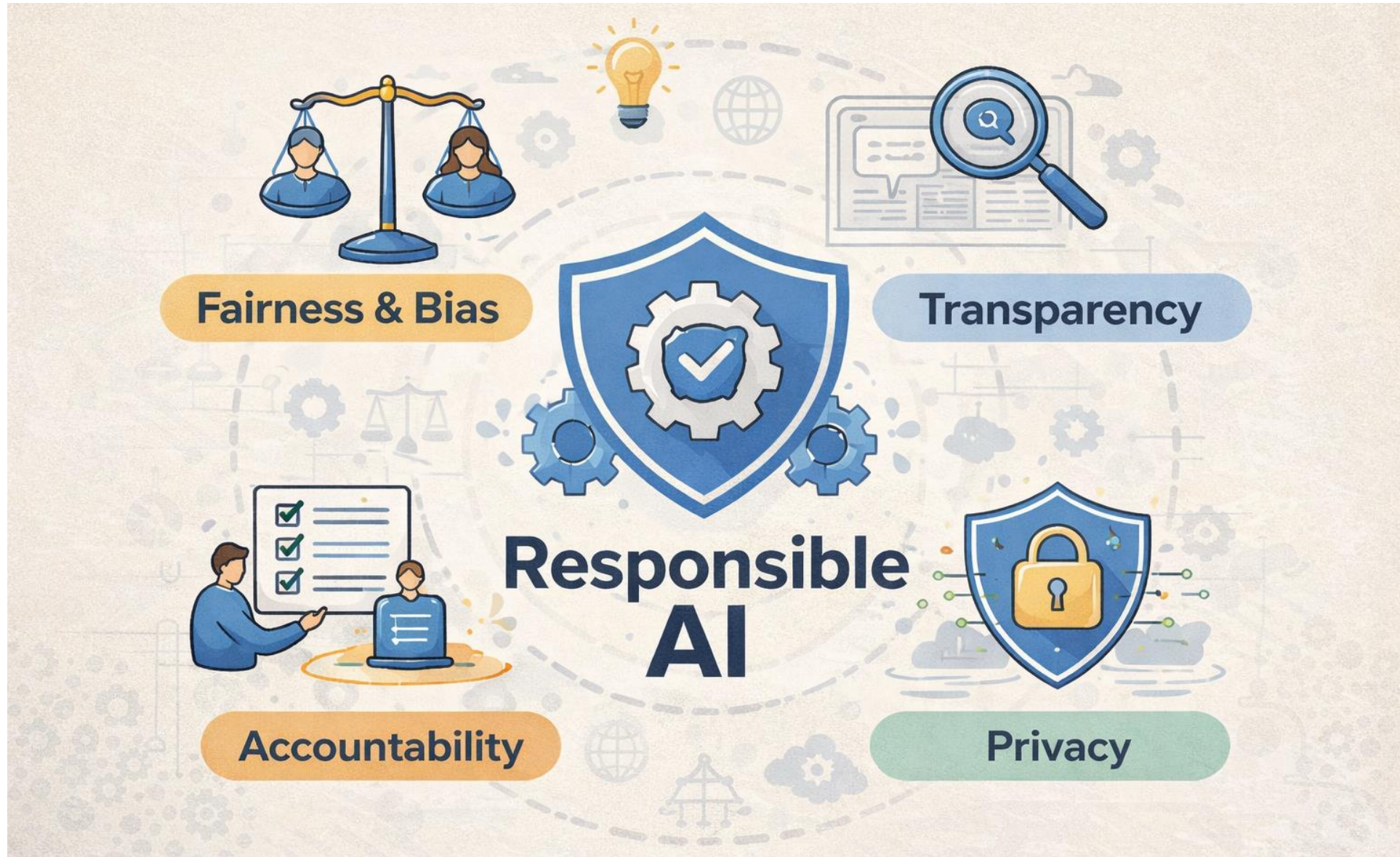


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What's behind AI?



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Pillar 1: Fairness & Bias

Algorithmic bias is not a 'glitch.'

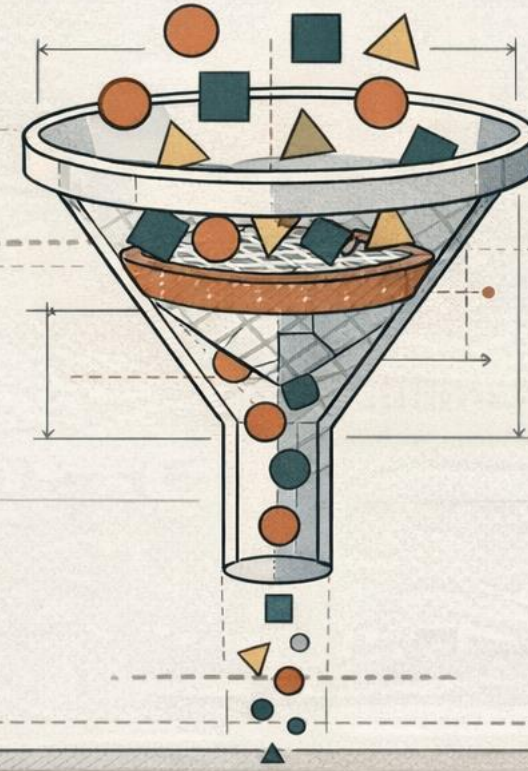
It is often the result of historical data or flawed design assumptions.

Fairness does not happen by accident.

It must be actively designed, measured, and evaluated.

EXAMPLES

- **Recruitment:** AI systems that reject CVs based on historically discriminatory hiring patterns.
- **Finance:** Loan approval tools that unfairly penalize certain demographic groups.



Key Insight:

AI fairness is a social and ethical challenge, not just a technical one.

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Pillar 2: Transparency & Explainability

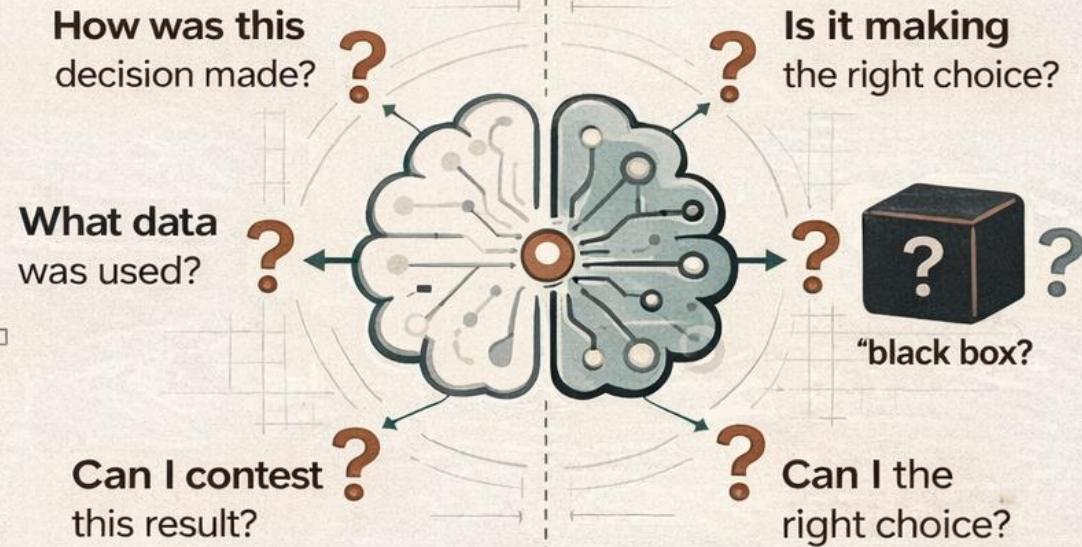
Many advanced AI systems are “black boxes”—their processes are not even clear to their creators.

Transparency allows us to **understand, question,** and ultimately trust AI-driven decisions.

EXAMPLES

- **Healthcare:** AI tools that diagnose illnesses without providing any information to doctors about how conclusions are drawn.
- **Justice:** AI systems that recommend sentences without clear rationale for sentencing decisions.

What Role Should Explainability Have?



Key Insight:

AI transparency encourages **responsible** use of AI, especially in critical contexts.

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Pillar 3: Accountability

An AI system cannot be prosecuted or jailed.
Automation does not erase human **responsibility**; it raises it to be even more critical.

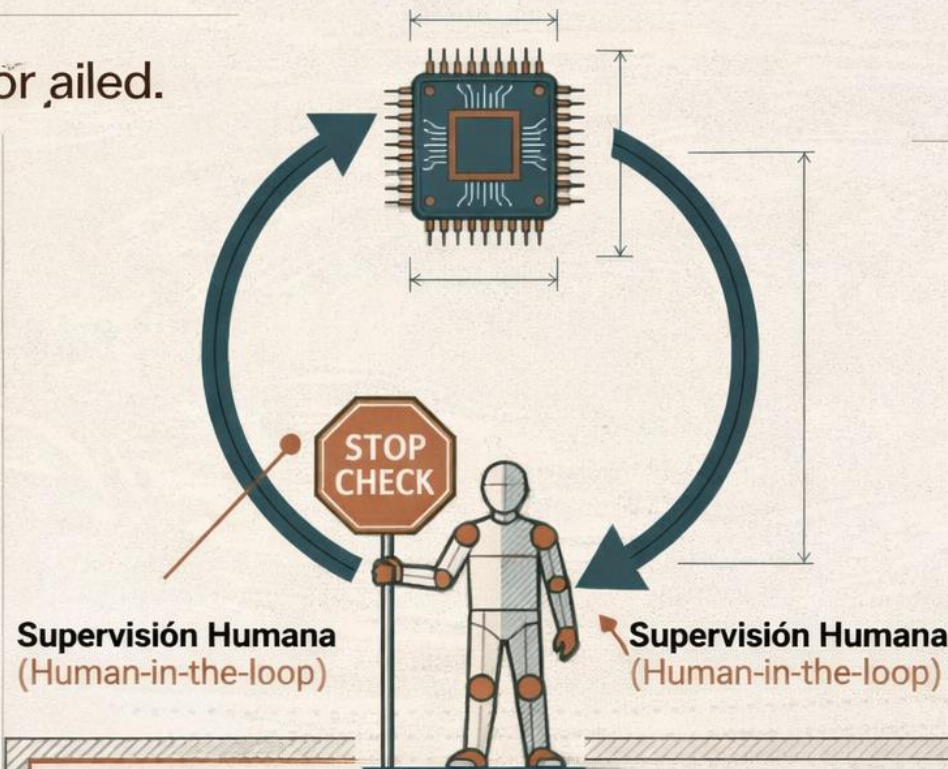
EXAMPLES

- Specially critical in high-risk sectors (medicine, justice, security)

- Humans retain final oversight

We must keep asking:

“Who is accountable for this decision?”



Key Insight:

Accountability remains essential
in AI decision-making despite automation.

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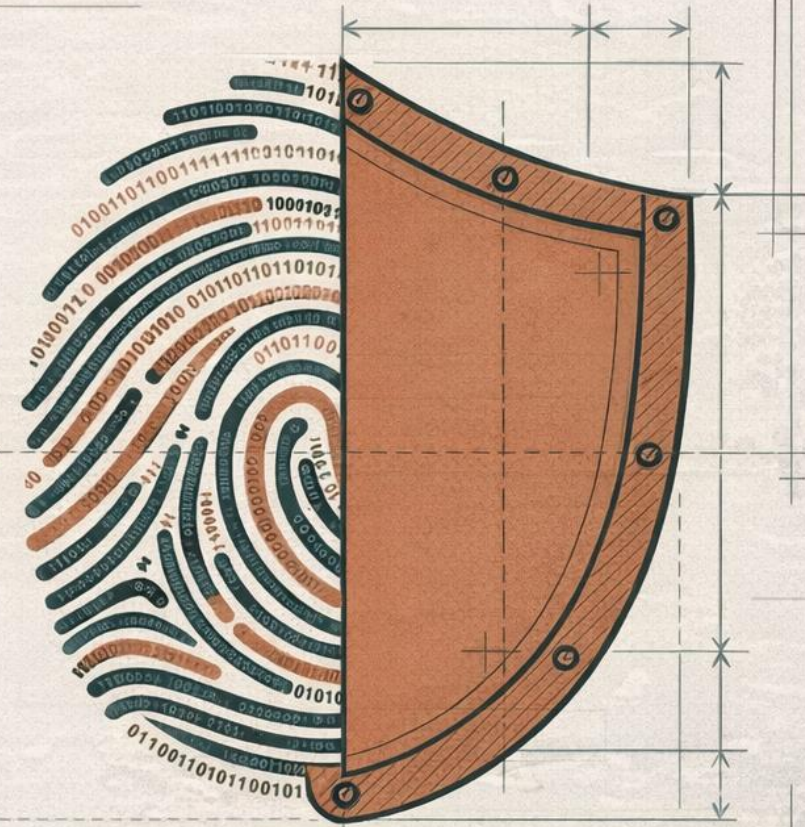
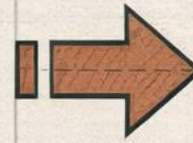
Pillar 4: Data Protection & Privacy

AI is fueled by massive amounts of data—often personal data.

Misuse of this information can lead to surveillance, misuse, and loss of autonomy and intimacy.

EXAMPLES

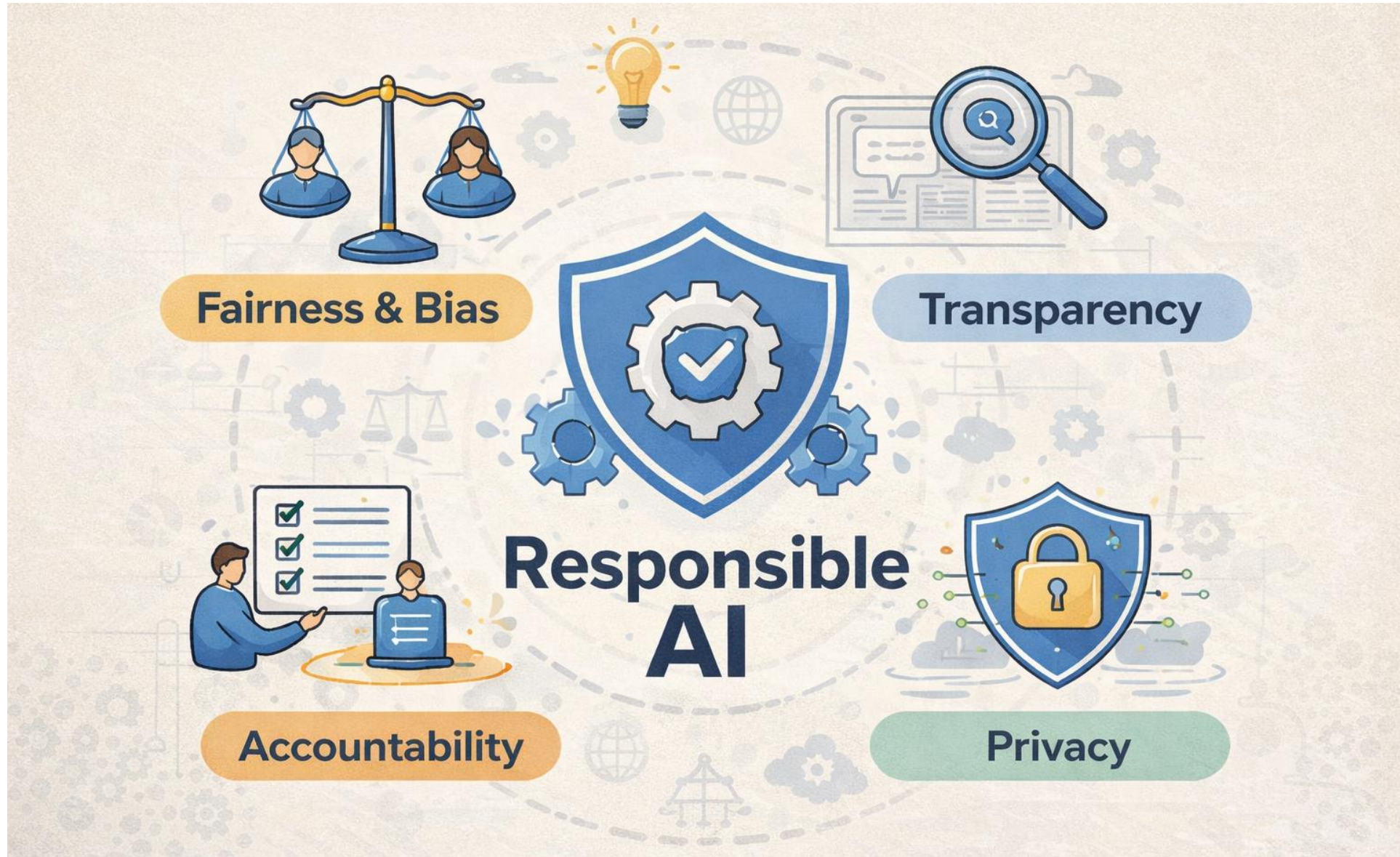
- Massive datasets collected without informed consent
- Surveillance-driven or commercial misuse of personal data



Key Insight:

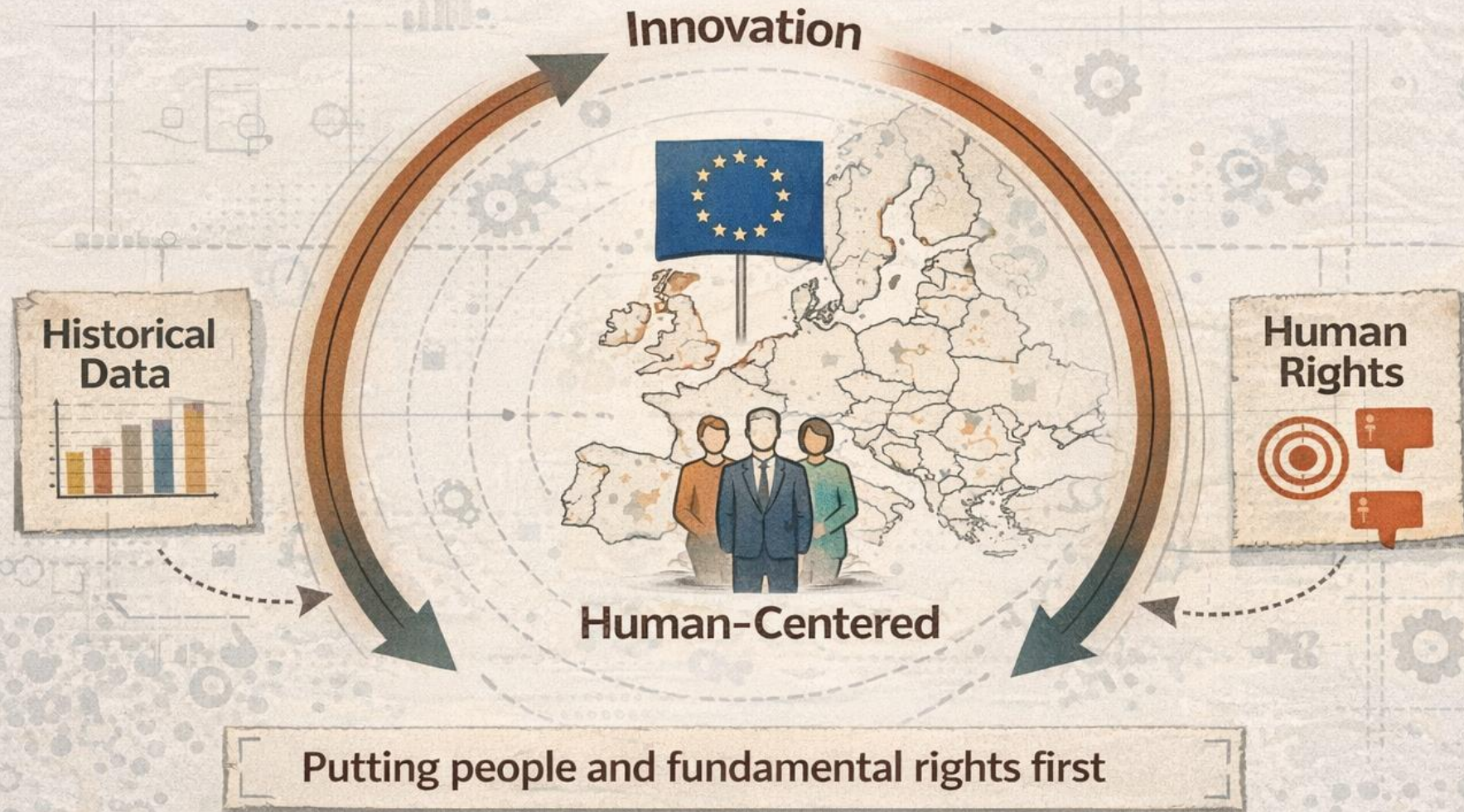
European values emphasize **robust data protection**, ensuring technological advancement is not achieved at the expense of privacy.

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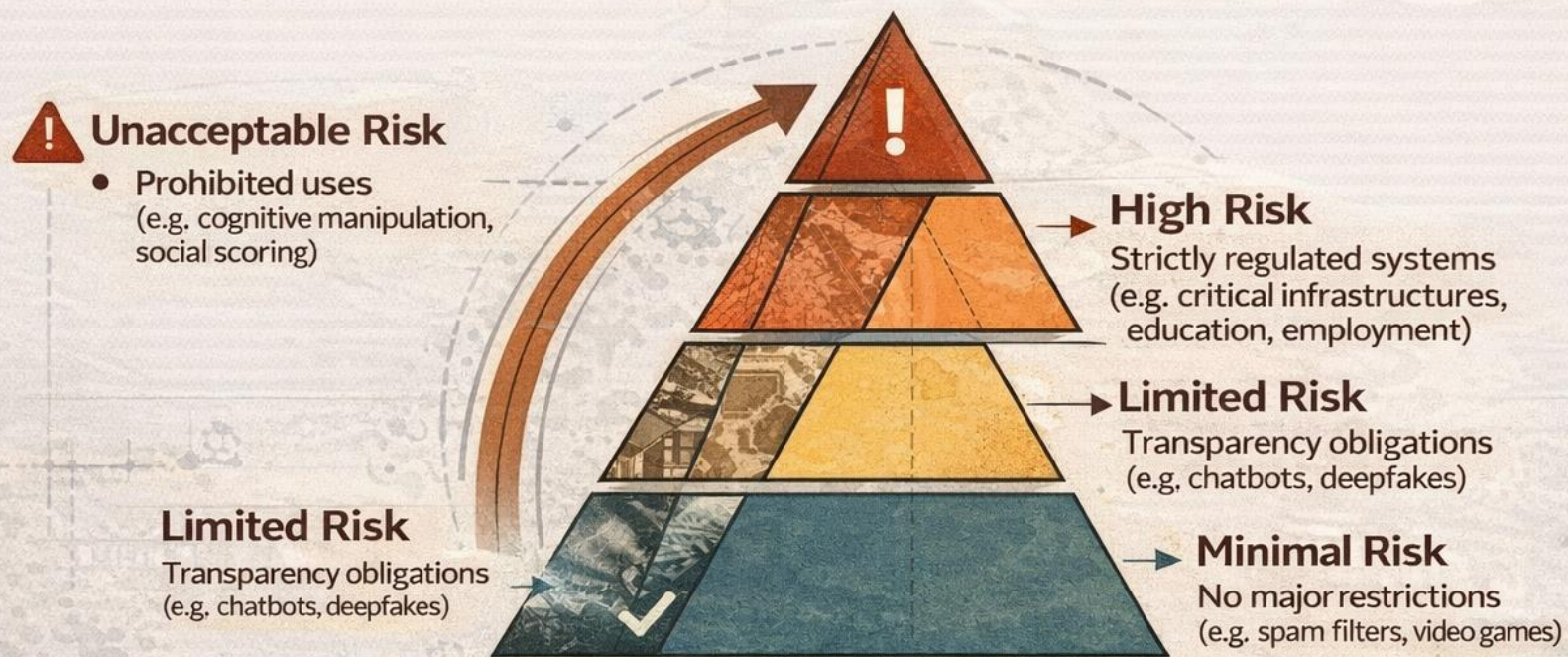
European Approach to AI



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The EU AI Act: The Risk Pyramid

European regulation classifies **AI systems** according to the **level of risk** they pose to fundamental rights, establishing proportional levels of regulation.



This risk-based approach aims to balance innovation and protection, ensuring that AI is developed in an ethical and safe way within the European Union.

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What can AI do in universities?



Adaptive Learning: AI-powered platforms personalize study plans for students.



Research: AI assists in data analysis, simulations, and scientific discovery.



Administration: AI automates repetitive tasks like administrative support and grading.



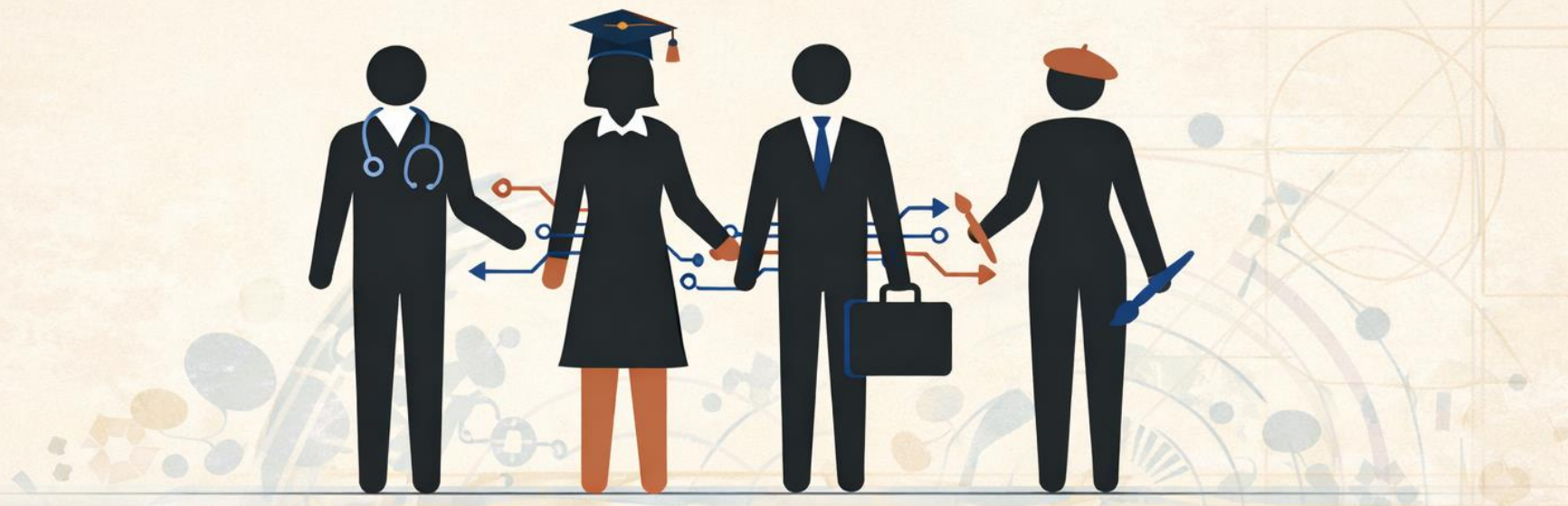
Accessibility: AI tools assist students with disabilities, like speech recognition and learning accommodations.



Academic Integrity: AI is used to detect plagiarism and ensure fair assessments.

AI in universities is advancing education, but must be implemented responsibly to uphold academic values and principles.

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**Responsible AI is not exclusive to computer scientists.
It is an interdisciplinary challenge.**

- As future professionals, you will use AI.
- As decision-makers, you will approve or reject its implementation.
- As informed citizens, you must protect your interests.

All disciplines are needed to shape an Ethical AI.

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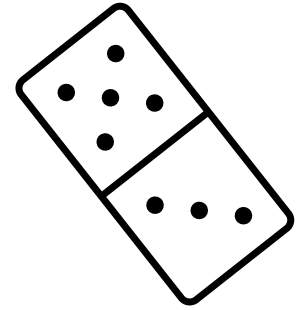
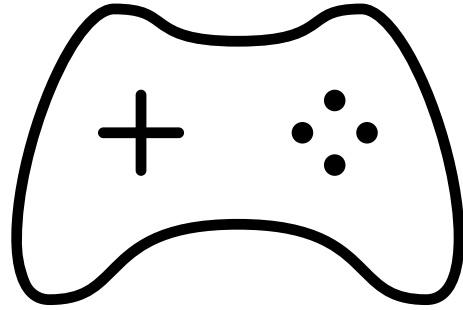
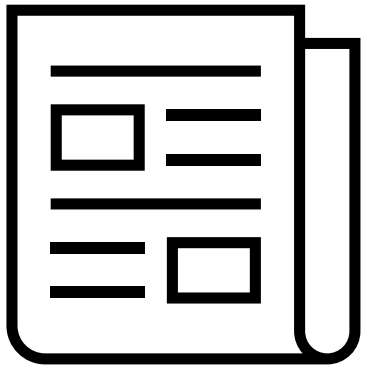
Critical Questions for Evaluating Systems

When encountering a new AI tool, ask yourself these four questions:

- 1 Who benefits from this system?
- 2 Who could be harmed?
- 3 What data is being used?
- 4 Can decisions be explained or challenged?

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Let's play!

Real news or Fake AI News?



Some of the following headlines are real news. Others are AI invented. Can you tell which is which?

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Real news or Fake AI News?

A hidden room with a TV, sofa, and Jacuzzi was found behind a bookshelf in a government building

A weather app warned of extreme heat during a snowstorm due to a misplaced decimal point.

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Real news or Fake AI News?

A hidden room with a TV, sofa, and Jacuzzi was found behind a bookshelf in a government building

A new app would control the heat due to low standards due to replaced point

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Real news or Fake AI News?

A smart fridge locked its owner out until they accepted a software update

Local police received calls reporting a lion in the fields — but it turned out to be a dog

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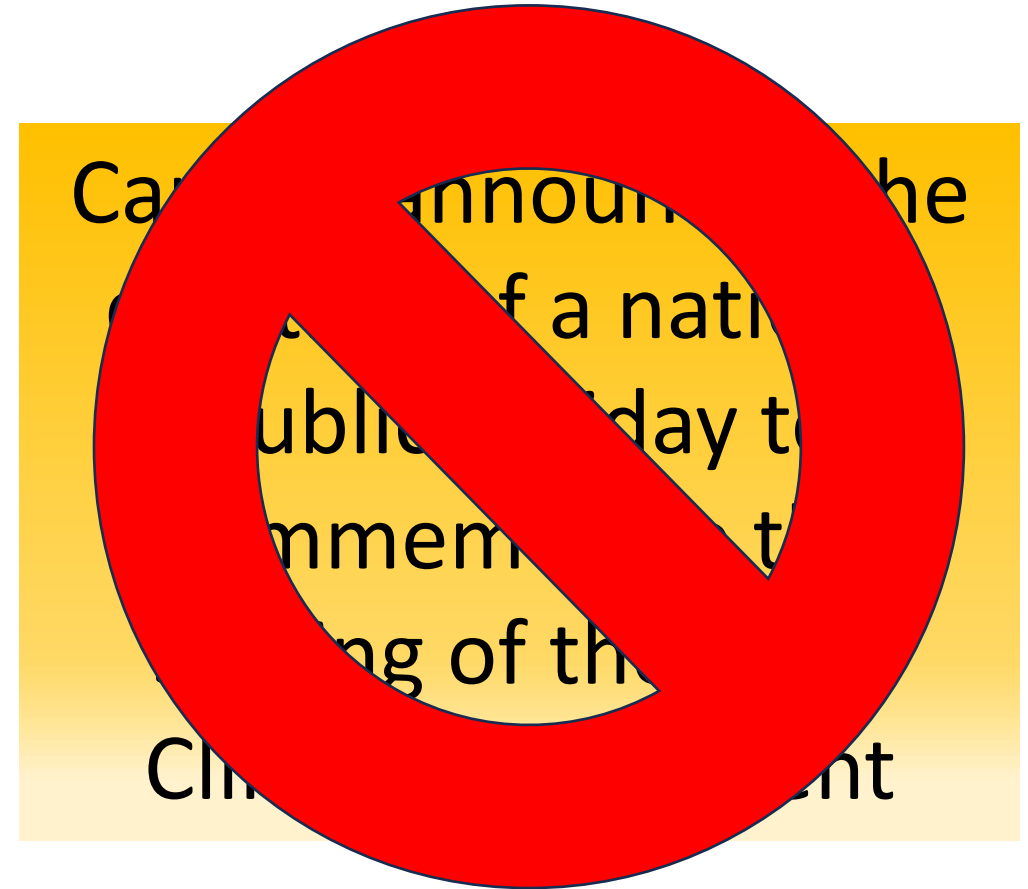
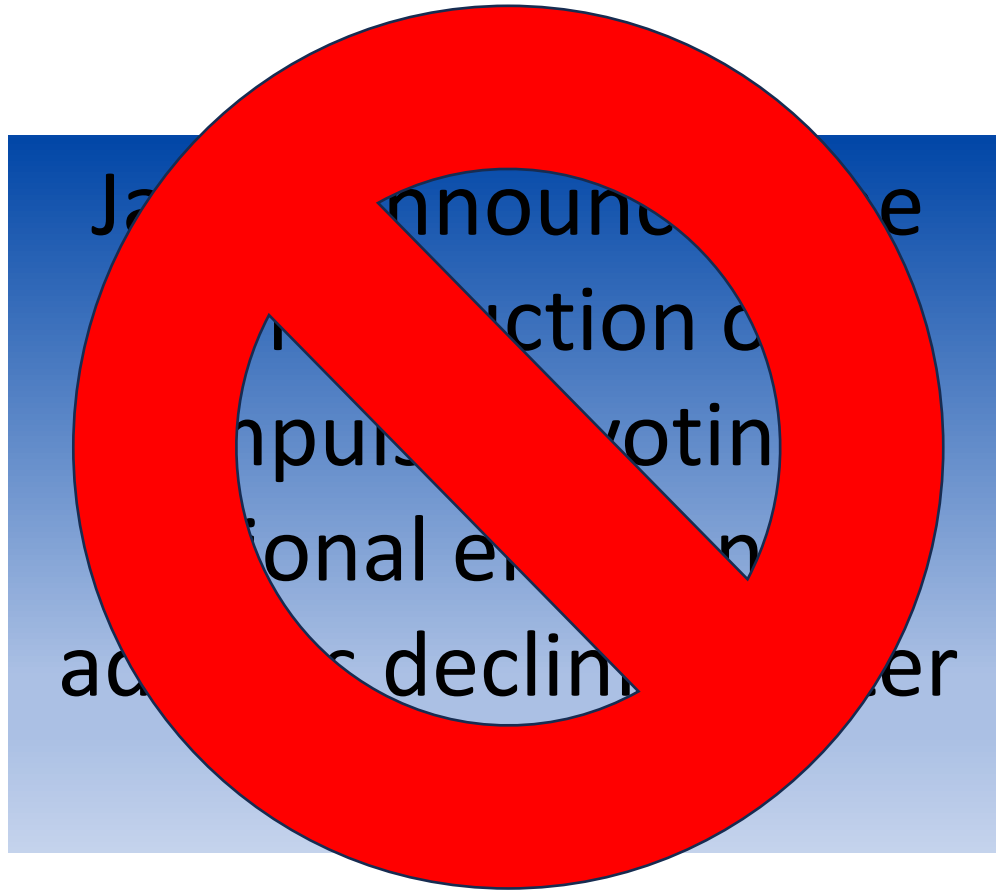
Real news or Fake AI News?

Japan announced the introduction of compulsory voting in national elections to address declining voter turnout

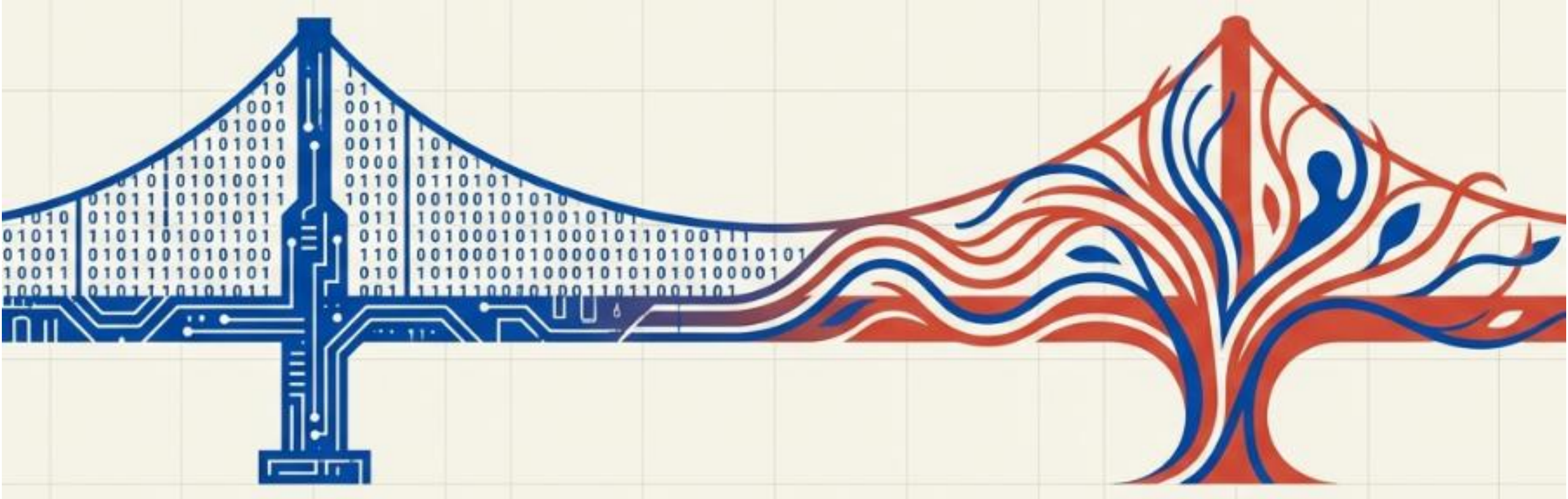
Canada announced the creation of a national public holiday to commemorate the signing of the Paris Climate Agreement

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AI does not replace responsibility: it amplifies it

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AI
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UNI





THANK YOU ALL

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