



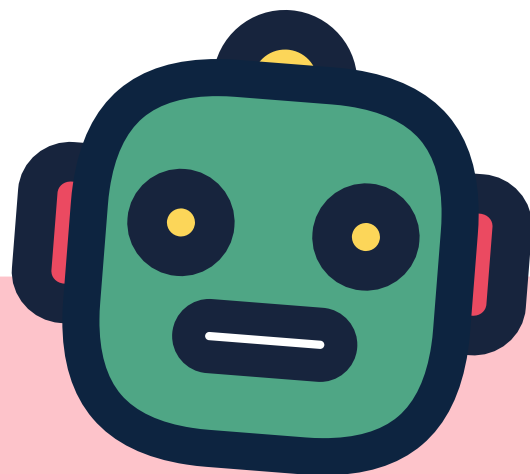
## Our Futures and AI

# What is AI? A Simple Guide

Artificial Intelligence (AI) can be confusing, as the **Scottish AI Alliance** notes, because it doesn't have one single, agreed-upon definition. In Scotland, the approach isn't just about the technical details; it's about trust, ethics, and people. The Scottish AI Alliance's vision is for Scotland to be a leader in creating AI that is trustworthy, ethical, and inclusive, focusing on how it empowers people, supports organisations, and influences fair policies.

**For youth work, this means viewing AI through a critical, rights-based lens. It's less about 'how it works' in a technical sense and more about asking:**

- Who does it help?
- Who might it harm?
- How do we use it fairly?



## Definitions

For youth work, a balanced, helpful understanding of AI is crucial. The Scottish AI Alliance provides two complementary definitions to guide us:

### A Broad, Human-Centric View

*"AI is the field of study within computer science that focuses on designing computer systems that can perform tasks we would normally consider to need 'human intelligence', such as making decisions and producing natural language."*

This definition is useful for starting a conversation with young people, helping them connect AI to familiar tasks like translation or recommendations. However, it risks creating a misleading impression that AI has human-like thoughts or feelings.

### A Precise, Systems-Based View

"An AI system is a machine-based system that, for a given set of human-defined objectives, can draw conclusions from input to generate predictions, content, recommendations, or decisions."

This more technical definition, based on the **OECD framework**<sup>1</sup>, reminds us that AI is a tool designed by humans to achieve specific goals, not an autonomous entity.

For youth workers, the most important lesson from the Scottish AI Alliance's work, especially their collaboration with **Children's Parliament**<sup>2</sup>, is that AI must be understood through a human rights and ethical lens. The Children's Parliament's **Exploring Children's Rights and AI project** asks another vital question: "What needs to happen for AI to play a role in keeping all children happy, healthy, and safe?" This shifts the focus from just what AI is to how it impacts well-being, fairness, privacy, and safety. It frames our role as helping young people critically explore how these systems influence their lives and rights.

### In practice, this means we should help young people see that:

AI is a collection of technologies (like algorithms that learn from data), not a single, magical 'brain'.

AI makes predictions and decisions based on patterns in data, but these can reflect real-world biases and create unfair outcomes.

Understanding AI is about critical thinking, safety, and agency which empower young people to question its role and shape its future in their communities.

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1 The **OECD framework** provides globally recognised standards and policy guidelines to promote economic cooperation, sustainable development, and improved living standards across member and partner countries. [https://www.oecd.org/en/publications/oecd-framework-and-good-practice-principles-for-people-centred-justice\\_cdc3bde7-en.html](https://www.oecd.org/en/publications/oecd-framework-and-good-practice-principles-for-people-centred-justice_cdc3bde7-en.html)

2 The **Children's Parliament** is a participatory platform designed to empower young people in Scotland by giving them a direct voice in decision-making processes that affect their lives and communities. <https://www.childrensparliament.org.uk/>

**Think of AI as a set of computer systems that can perform tasks usually requiring human intelligence. These tasks include things like:**

- **Learning** from information (data).
- **Finding patterns** or making predictions.
- **Recognising** images, speech, or text.
- **Making** decisions or recommendations.

Crucially, AI systems are created by people and trained on data from our world. This means they are not neutral; they can reflect and even amplify human biases, making the ethical framework around them essential.

## Generative AI

AI is a broad field, but this toolkit focuses specifically on Generative AI (Gen AI). Why? Because for most young people, and society as a whole, this is where the most direct, creative, and sometimes challenging encounters with AI are happening today, through tools like ChatGPT, DALL-E, and Midjourney.

Gen AI refers to powerful systems designed to **create new content**, including text, images, music, and video, by learning patterns from vast datasets. It's important to remember that this is an incredibly fast-paced field. What we offer here are foundational principles and ethical frameworks to build understanding that remains relevant even as the specific tools evolve.

### A Youth Work Perspective on Gen AI:

**You can frame it in two practical ways for young people:**

- 1. The Creative Partner:** A tool that performs tasks we associate with human creativity, such as writing or design. This is a great conversation starter.
- 2. The Powerful Pattern-Matcher:** More accurately, it's a system that uses data to generate new predictions and content. This reminds us it's a human-built tool, not an independent mind.

## Glossary

To help you navigate conversations about AI, here are some key terms you'll encounter:

- **Algorithm:** A step-by-step set of rules or instructions a computer follows to solve a problem or complete a task.
- **Bias (in AI):** When an AI system produces unfair outcomes that favour one group of people over another, often because it was trained on incomplete or prejudiced historical data.
- **Data:** The information (text, images, numbers, etc.) used to train and fuel an AI system. AI 'learns' patterns from this data.
- **Deepfake:** A type of synthetic media where a person's likeness (face, voice) is replaced with someone else's using AI, creating a convincing but fake video or audio recording. This is a key term for discussions on misinformation and digital safety.
- **Ethical AI:** The practice of designing, developing, and deploying AI systems that are fair, accountable, transparent, and respect human rights.
- **Generative AI (Gen AI):** A type of AI that can create new content—like text, images, music, or code—based on what it has learned from existing data. Examples include ChatGPT and DALL-E.
- **Hallucination (AI Hallucination):** When a generative AI tool produces confident-sounding but incorrect, nonsensical, or fabricated information. This underscores the need for critical fact-checking.
- **Machine Learning:** A common way to build AI where a system improves at a task by learning from data patterns without being explicitly programmed for every step.
- **Natural Language Processing (NLP):** A branch of AI that analyses and generates language data, such as speech and text. It is the technology behind many modern chatbots, translation tools, and voice assistants.
- **Prompt:** The instruction or question a user gives to an AI system (like a chatbot or image generator) to get a specific response. Learning to write clear prompts ("prompt engineering") is a key digital skill.
- **Training Data:** The specific dataset used to teach a machine learning model. The quality, diversity, and size of this data directly influence the AI's performance and potential biases.

## Contributors

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