# Glossary

## **Google AI Essentials**



### A

**Artificial intelligence (AI):** Computer programs that can complete cognitive tasks typically associated with human intelligence

**Al augmentation:** The process of using Al to improve a work product, whether by making it easier to do or higher in quality

**Al automation:** The process of using Al to accomplish tasks, without any action on the user's part

**Al model:** A computer program trained on a set of data to recognize patterns and perform specific tasks

Al tool: Al-powered software that can automate or assist users with a variety of tasks

Al user: Someone who leverages Al to complete a personal or professional task

**Allocative harm:** Wrongdoing that occurs when an Al system's use or behavior withholds opportunities, resources, or information in domains that affect a person's well-being

#### B

**Biased data:** Data that is incomplete, does not accurately represent populations, or includes preferential treatment for certain individuals or groups

## C

**Chain-of-thought prompting:** A prompting technique that involves requesting a large language model to explain its reasoning processes

**Cognitive task:** Any mental activity, such as thinking, understanding, learning, and remembering

**Conversational AI tool:** A generative AI tool that processes text requests and generates text responses

## D

**Data bias:** A circumstance in which systemic errors or prejudices lead to unfair or inaccurate information, resulting in biased outputs

**Deepfakes:** Al-generated fake photos or videos of real people saying or doing things that they did not do

**Drift:** The decline in an Al model's accuracy in predictions due to changes over time that are not reflected in the training data

### F

Few-shot prompting: A technique that provides two or more examples in a prompt

## G

Generative AI: Al that can generate new content, like text, images, or other media

## Н

Hallucinations: Al outputs that are not true

**Human-in-the-loop approach:** A combination of machine and human intelligence to train, use, verify, and refine AI models

**Interpersonal harm:** The use of technology to create a disadvantage to certain people that negatively affects their relationships with others or causes a loss of one's sense of self and agency

K

**Knowledge cutoff:** The concept that an Al model is trained at a specific point in time, so it doesn't have any knowledge of events or information after that date

Large language model (LLM): An Al model that is trained on large amounts of text to identify patterns between words, concepts, and phrases so that it can generate responses to prompts

M

**Machine learning (ML):** A subset of Al focused on developing computer programs that can analyze data to make decisions or predictions

**Multimodal model:** An Al model that can accept and learn from multiple types of input, such as images, video, or audio

N

Natural language: The way people talk or write when communicating with each other

O

One-shot prompting: A technique that provides a single example in a prompt

Open dataset: A dataset that is freely available to anyone to use

#### P

**Privacy:** The right for a user to have control over how their personal information and data are collected, stored, and used

**Prompt:** Text input that provides instructions to the Al model on how to generate output

**Prompt engineering:** The practice of developing effective prompts that elicit useful output from generative Al

## Q

**Quality-of-service harm:** A circumstance in which Al tools do not perform as well for certain groups of people based on their identity

## R

**Representational harm:** An Al tool's reinforcement of the subordination of social groups based on their identities

**Responsible AI:** The principle of developing and using AI ethically, with the intent of benefiting people and society while avoiding harm

## S

**Security:** The act of safeguarding personal information and private data, and ensuring that the system is secure by preventing unauthorized access

**Social system harm:** Macro-level societal effects that amplify existing class, power, or privilege disparities, or cause physical harm, as a result of the development or use of Al tools

**Systemic bias:** A tendency upheld by institutions that favors or disadvantages certain outcomes or groups

## T

**Training set:** A collection of data used to teach Al

**Transparency:** The idea that an Al tool should provide insight into how it works, why it made a particular output, and what factors contributed to that output