

Glossary of Useful Terms

The following definitions and key terms are helpful in understanding the report of the taskforce:

- 1) **Algorithm:** a step-by-step procedure or set of rules designed to perform a specific task or solve a specific problem
- 2) **Artificial Intelligence (AI):** the simulation of human intelligence in machines, programmed to think and learn like humans
- 3) **Bias in AI:** the tendency of an AI model to make decisions that are systematically prejudiced due to underlying assumptions in the algorithm or biases in the training data
- 4) **Chatbot:** a computer program that simulates human conversation through text or voice interactions, often powered by AI
- 5) **ChatGPT:** a specific type of generative large language model developed by OpenAI, designed to create human-like text based on the input it receives that utilizes deep learning and has been applied in various fields including natural language understanding, content creation, and conversation simulation
- 6) **Data Training:** the process of feeding data into an AI model to teach it specific behaviors and patterns, allowing it to learn and make predictions or decisions
- 7) **Deep Learning:** a subset of machine learning that uses neural networks with three or more layers, allowing for more complex and abstract pattern recognition
- 8) **Ethical AI:** refers to the practice of using AI in a manner that aligns with accepted moral principles and values, especially in terms of fairness, transparency, and accountability
- 9) **Generative AI:** AI models that create new, original content such as text, images, or music, based on the data they have been trained on
- 10) **Large Language Model (LLM):** a type of machine learning model designed to understand and generate human-like text, used in various applications including content creation and natural language understanding
- 11) **Machine Learning (ML):** a subset of AI, where algorithms allow computers to learn and make decisions from data without being explicitly programmed
- 12) **Natural Language Processing (NLP):** a branch of AI focused on the interaction between computers and humans using natural language, enabling machines to read, interpret, and respond to human language
- 13) **Neural Network:** a computational model inspired by the way human brain cells work, used in machine learning to process complex patterns and relationships in data
- 14) **OpenAI:** an artificial intelligence research lab consisting of the for-profit OpenAI LP and its parent company, the non-profit OpenAI Inc. OpenAI is dedicated to advancing digital intelligence and conducts research on various AI topics including machine learning, deep learning, and natural language processing
- 15) **Reinforcement Learning:** a type of machine learning where agents learn to make decisions by receiving rewards or penalties based on the actions they take
- 16) **Supervised Learning:** a type of machine learning where algorithms are trained on a labeled dataset, which means the algorithm has access to an answer key while learning
- 17) **Unsupervised Learning:** a type of machine learning where algorithms are trained without any labeled response data, learning to identify patterns and structures within the input data