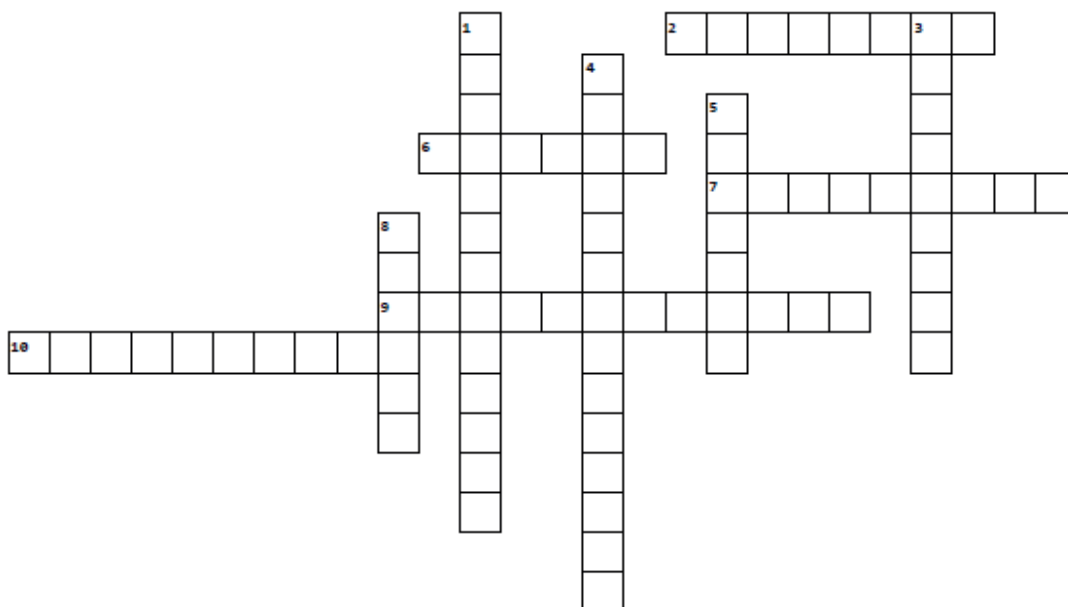


Prompt for GPT-3.5: "Give definitions of the ten most important concepts in artificial intelligence" (6 Aug. 2023)

GPT-3.5 answer: "Artificial Intelligence (AI) is a vast field with numerous important concepts. Here are definitions of ten key concepts: [Words in *italics* are used in the crossword puzzle after the text: square brackets [...] indicate changes to the text].

1. **Machine Learning (ML):** Machine Learning is a *subset* of AI that focuses on developing *algorithms* and statistical models that enable computers to learn from and make predictions or decisions based on data, without being explicitly programmed. It involves techniques like supervised learning, unsupervised learning, and reinforcement learning.
2. **Deep Learning:** Deep Learning is a subfield of Machine Learning that uses artificial *neural networks* with multiple layers (deep architectures) to learn and represent complex patterns and relationships in data. It has been instrumental in significant *breakthroughs* in areas such as image and speech recognition.
3. **Natural Language Processing (NLP):** Natural Language Processing is a branch of AI that deals with the interaction between computers and human language. It enables machines to understand, interpret, and generate human language, facilitating tasks like sentiment analysis, language translation, and *chatbots*.
4. **Computer Vision:** Computer Vision is the field of AI that focuses on enabling computers to interpret visual information from the world. It involves techniques like object detection, image classification, and image generation, allowing machines to "see" and understand the content of images and videos.
5. **Reinforcement Learning:** Reinforcement Learning is a type of Machine Learning where an agent learns to make decisions by interacting with an environment. The agent receives *feedback* in the form of rewards or penalties based on its actions, guiding it to optimize its behavior over time.
6. **Artificial General Intelligence (AGI):** Artificial General Intelligence refers to AI systems that possess human-level *cognitive* abilities across a wide range of tasks, rather than being specialized in a specific domain. AGI [...] has not been fully realized yet.
7. **Artificial Narrow Intelligence (ANI):** Artificial Narrow Intelligence refers to AI systems that are designed and trained for specific tasks or domains, showing intelligence only in those limited areas. Most of the AI applications in use today fall under ANI. [**Generative AI:** AI that can generate/produce content, including text and images, etc. ChatGPT and Midjourney do this.]
8. **Algorithm Bias:** Algorithm Bias refers to the presence of unfair or discriminatory outcomes in AI systems due to biased training data or design choices. It highlights the importance of ethical considerations in AI development to ensure fairness and avoid reinforcing *societal biases*.
9. **Data Privacy and Security:** Data Privacy and Security are critical concerns in AI, as AI systems often rely on vast amounts of personal and sensitive data. It involves safeguarding data to prevent unauthorized access, misuse, or data *breaches*.
10. **Ethical AI:** Ethical AI refers to the practice of developing AI systems that adhere to moral principles and human values. It involves considering the potential societal impacts of AI, ensuring fairness, transparency, *accountability*, and avoiding harm to individuals or communities."



Across

2. The return of information concerning the operation of a process.
6. Unwanted access or entry into protected data.
7. A logical arithmetical or computational procedure that solves a problem.
9. An advance, a step forward in a difficult situation.
10. (Two words) A way of thinking in a society that is partial or prejudiced.

Down

1. (Two words) A computer system modeled on the human brain.
3. Relating to the mental process of knowing, including awareness, perception, reasoning and judgement.
4. To be answerable for one's actions.
5. A computer programme that mimics human conversation.
8. A set which is part of a larger set.