

CAIE Computer Science IGCSE

6.3 Artificial intelligence

Flashcards

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What is Artificial Intelligence (AI)?



What is Artificial Intelligence (AI)?

A branch of computer science dealing with the simulation of intelligent behaviours by computers.



What are three main characteristics of AI?



What are three main characteristics of AI?

Collection of data and rules for using that data, ability to reason, and ability to learn and adapt.



What is an expert system?



What is an expert system?

An AI program that mimics human expert decision-making using a knowledge base, rule base, inference engine, and user interface.



What is a knowledge base in an expert system?



What is a knowledge base in an expert system?

A database that stores facts and information about the problem area for the expert system to use.



What is a rule base in an expert system?



What is a rule base in an expert system?

A set of “if-then” rules derived from expert knowledge that guide the decision-making process.



What is an inference engine in an expert system?



What is an inference engine in an expert system?

The part of the system that applies rules from the rule base to the knowledge base to draw conclusions or make decisions.



What is a user interface in an expert system?



What is a user interface in an expert system?

The component that allows users to interact with the system by inputting data and receiving advice or decisions.



What is machine learning?



What is machine learning?

A type of AI where programs automatically improve by learning from data and the quality of their own output and adapt their processes without explicit reprogramming.

