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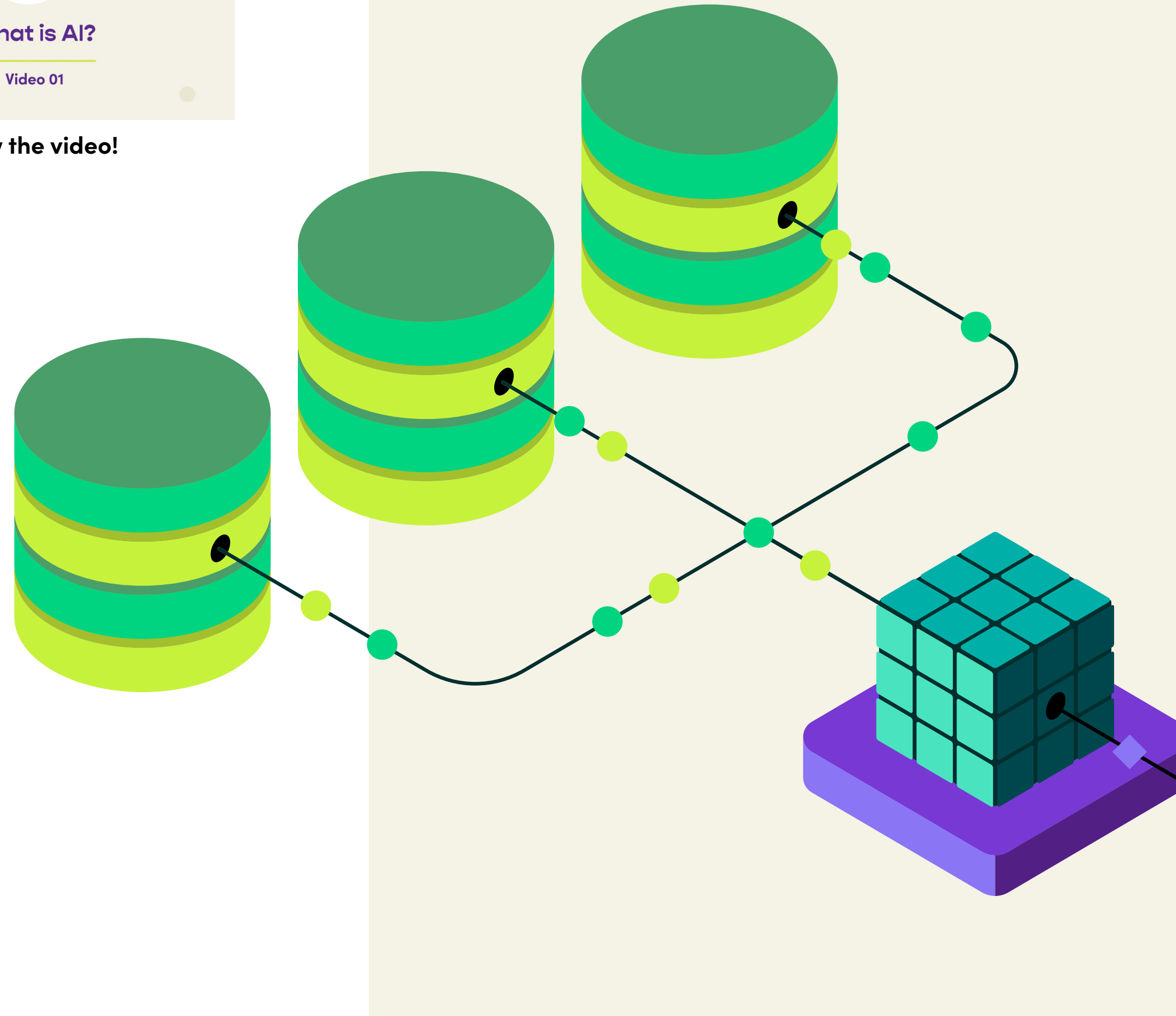
AI Systems Tasks



What is AI?

Video 01

View the video!



AI in
Education
Is It a Good
Thing, or Not?

* Artificial Intelligence

“A discipline dedicated to mimicking the cognitive capabilities of human intelligence in order to create systems or machines capable of performing functions that would normally require human intelligence or even surpassing it.”

Definition freely translated and adapted from the Office québécois de la langue française (OQLF) definition of artificial intelligence.

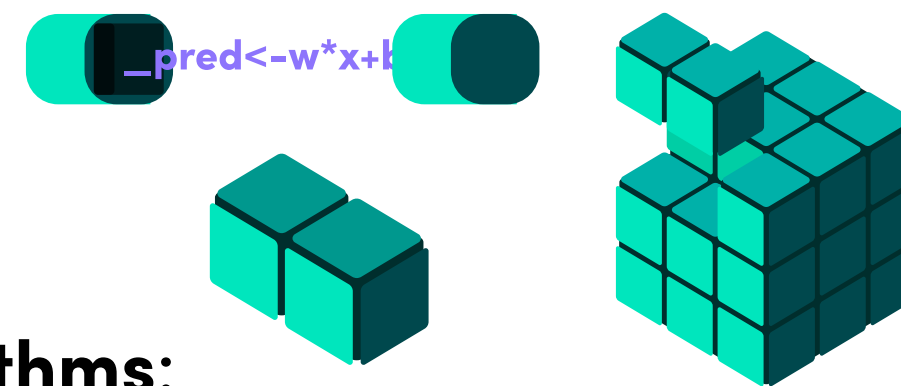
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The Basic Functioning of AI

An AI system applies a large set of **algorithms**: sequences of logical, ordered mathematical operations programmed by humans.



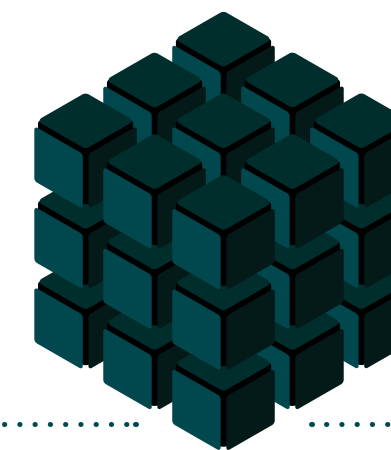
When data enters an AI system, the algorithms analyze and process it to produce results.

Data

Algorithms have been around for a long time; they are the foundation of every computer program.

Results

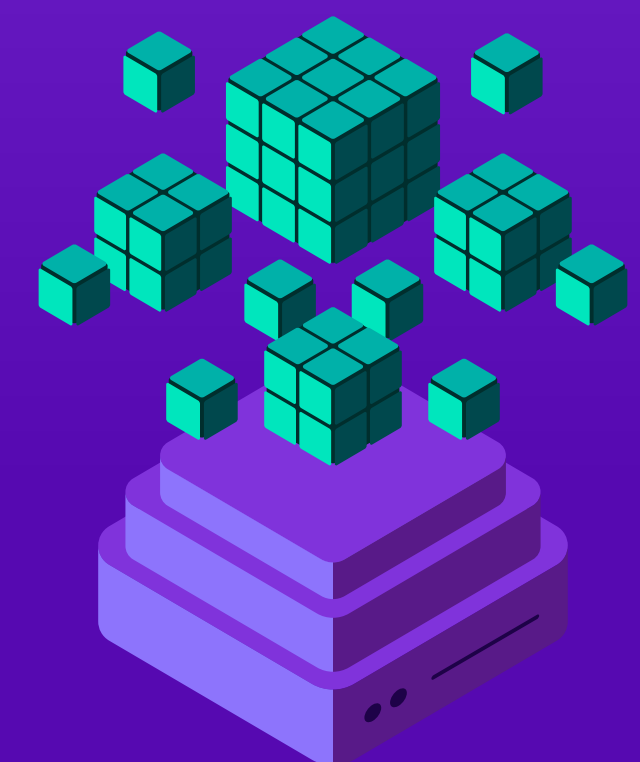
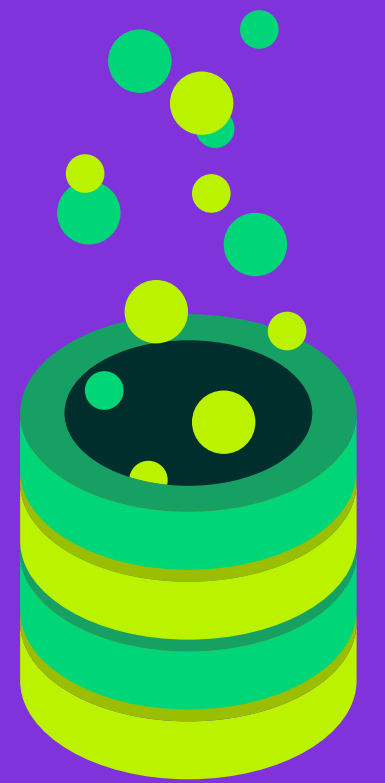
Systems can become so complex that even the people who originally programmed them have difficulty explaining how certain results were produced. These AI systems are referred to as **black boxes**.

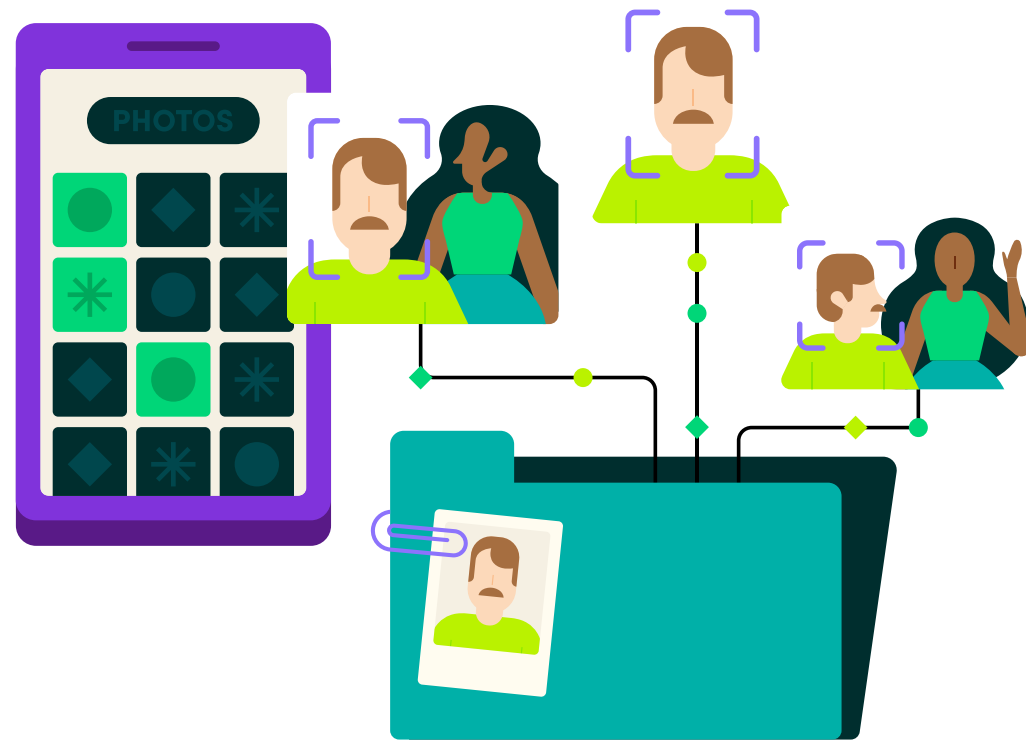


The Recent Surge of AI

In the last few years, AI has taken off thanks to the convergence of three elements:

- Access to **massive, well-annotated databases**
- The design of graphic processors with very powerful **computing capabilities**
- The creation of complex, deep **algorithm architectures**





AI Recognizes and Classifies

Photo management apps generally include an AI system. By digitizing the features of the different faces in photos, AI can group similar faces together, making it easier to identify and organize them.

AI Communicates

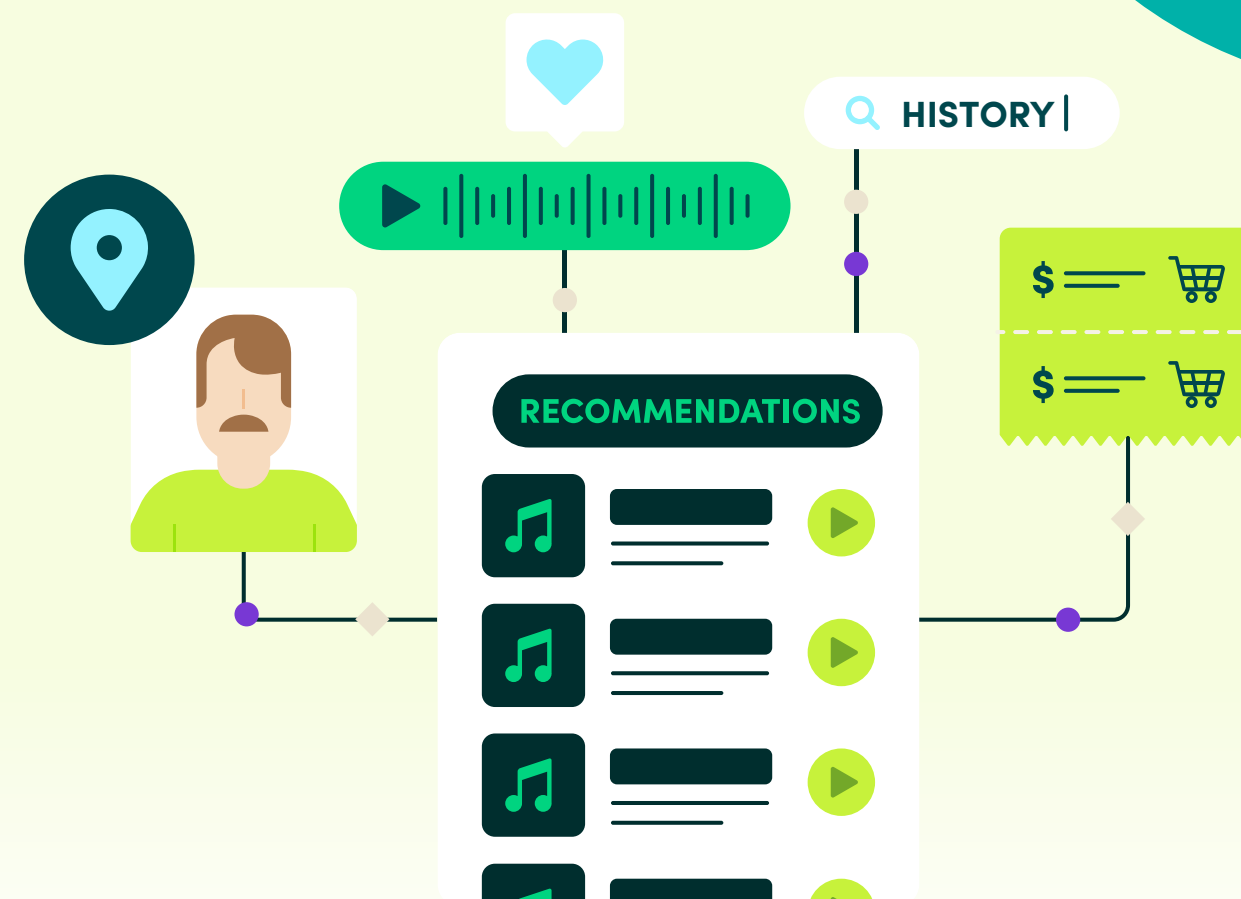
Some AI systems have learned the structure of spoken and written language and can generate responses by predicting the words and sentences most likely to answer a request. Today, chatbots can hold complex conversations and can easily pass themselves off as a human.



AI System Tasks

AI Makes Recommendations

Music streaming platforms analyze current music trends and customer data to make music recommendations that we are likely to enjoy. Moreover, they adapt in real time based on our behaviour on the platform.



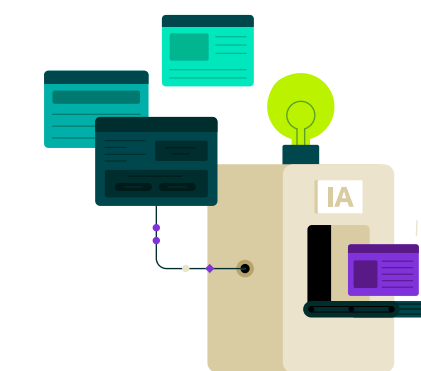
AI Generates Content

Generative AI systems generate text, images, videos, musical pieces, and much more. To understand their unique features, let's compare them to a traditional search engine.



A search engine finds websites that could answer our questions

Content generation requires many more operations from a computational standpoint, which, in turn, requires considerably more energy: 10 to 60 times more.



A generative AI system generates a response based on the data it finds on the web