

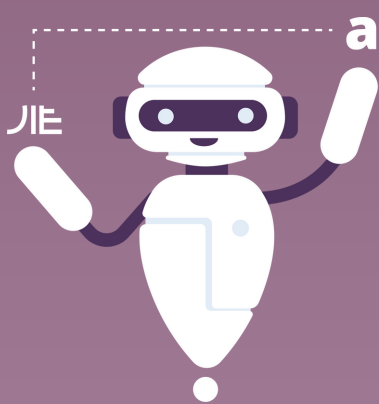
FUNDAMENTALS OF AI

Strong AI

Strong AI, refers to AI systems that possess human-like cognitive abilities and can do any task

Weak AI

Weak AI, also known as narrow or specific AI, is designed for particular tasks or domains, lacking general intelligence.



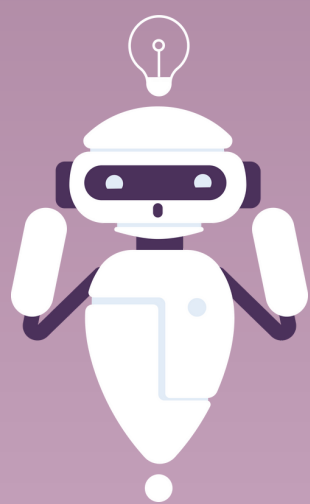
1

Production System

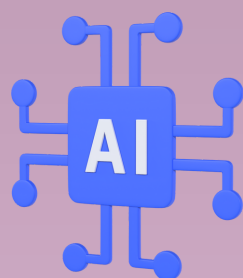
A production system is a rule-based framework for problem-solving. It consists of rules that conditionally trigger actions based on the current state

Cellular Automata

Cellular automata, are computational models composed of a grid of cells, each in a specific state



3



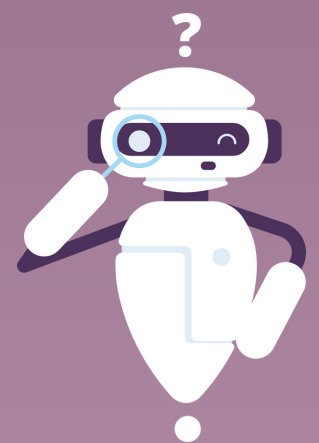
Informed Search

Informed search utilizes additional knowledge, to make more educated decisions during the search process.

Uninformed Search

Uninformed search, explores the search space without any additional information, making decisions based solely on the current state.

2



Expert Systems

An expert system is designed to mimic the decision-making abilities of a human expert in a specific domain.

Applications

They excel at handling well-defined problems within a specific domain and have been valuable tools.

4

Team 3

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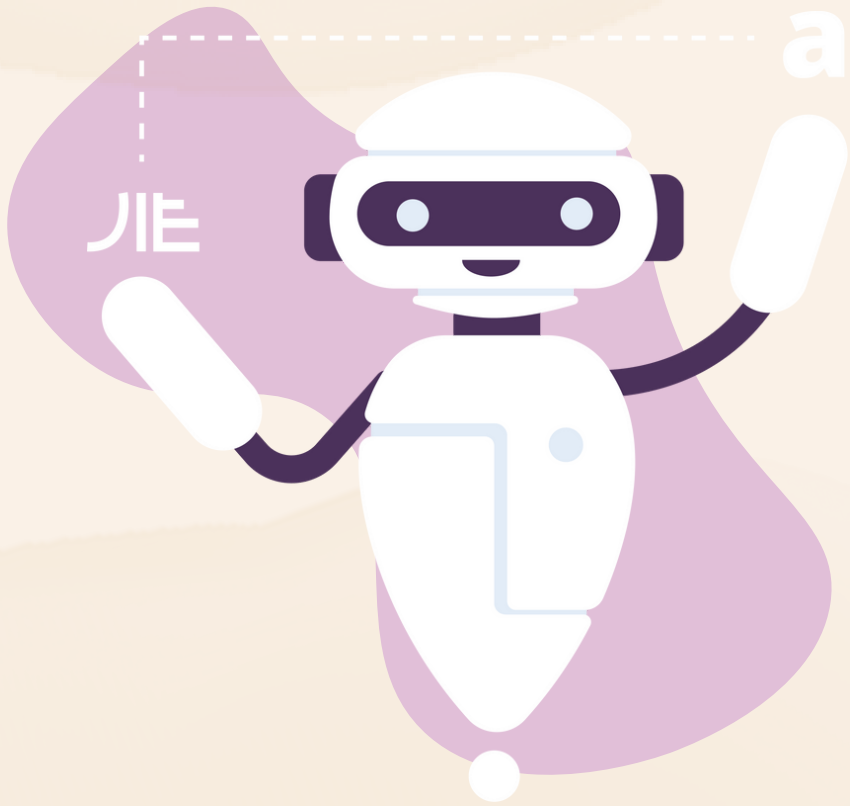
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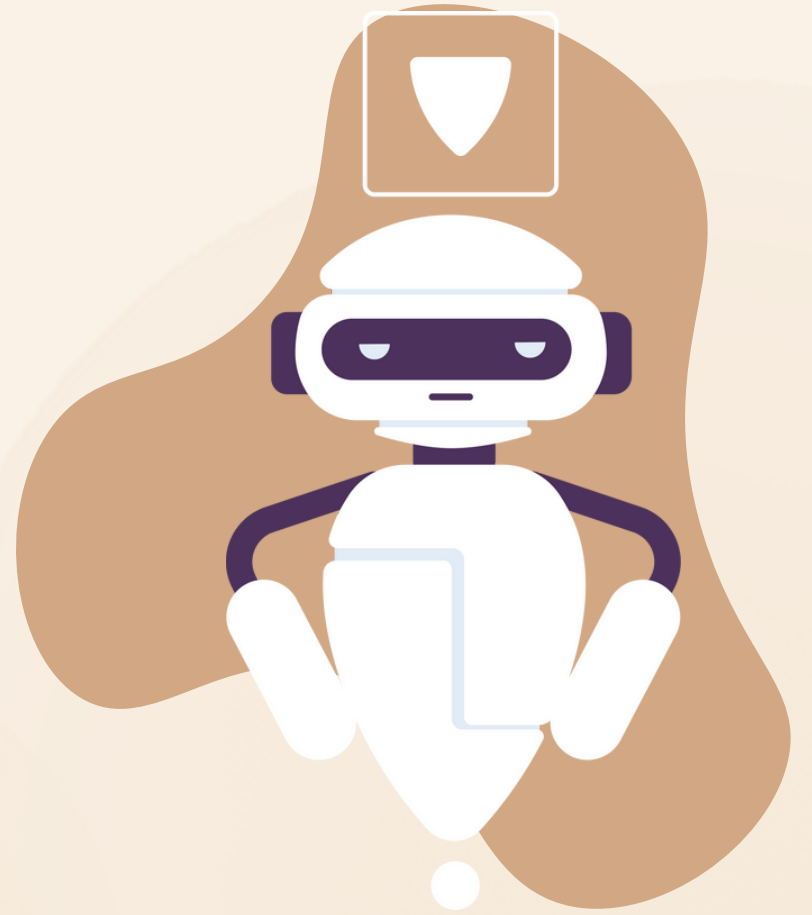
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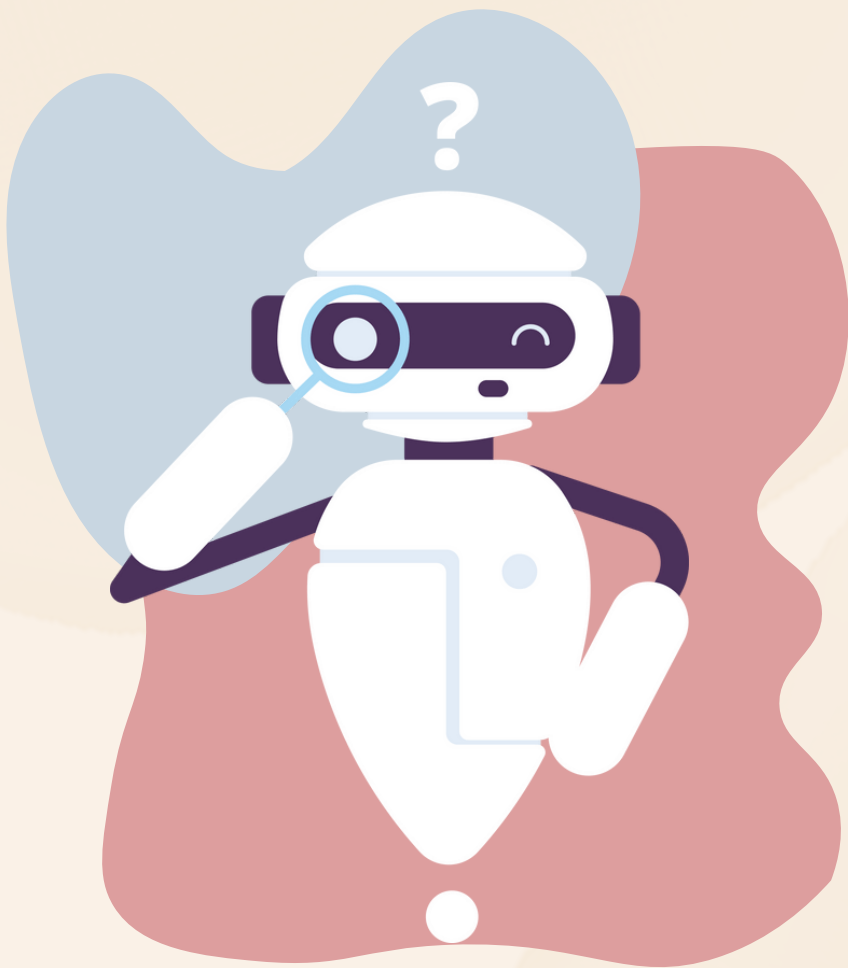
Fundamentals of *Artificial Intelligence*



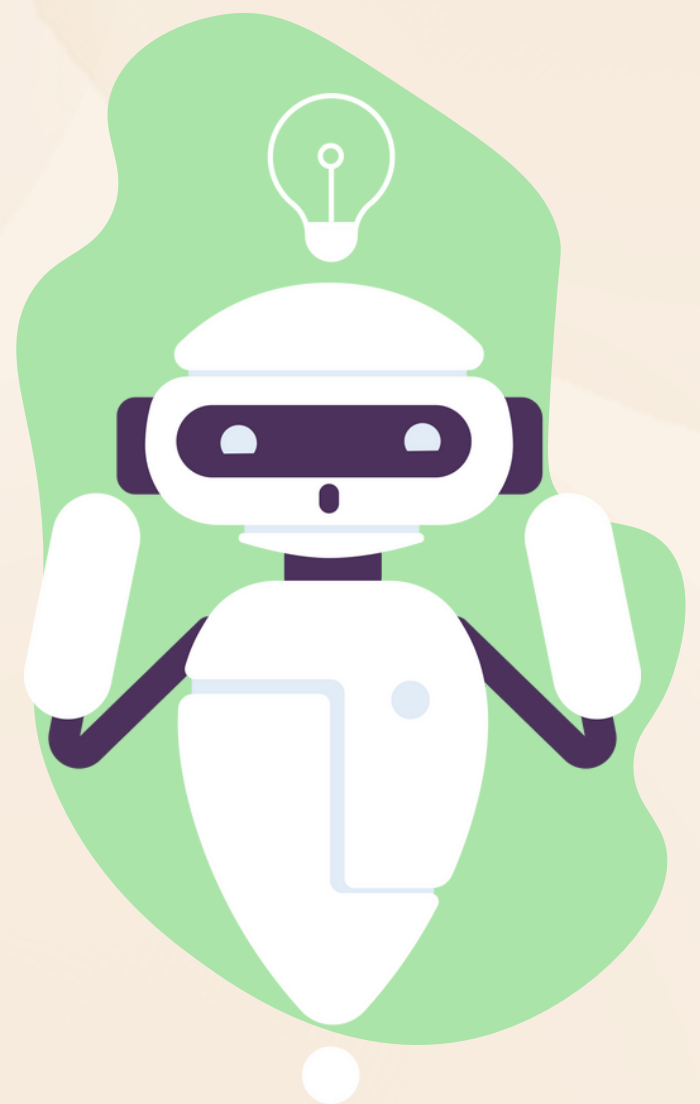
AI programs are extremely useful as **language translators** making us of NLP and other ML algorithms



AI applications increase efficiency by **automating repetitive tasks** and processes.



AI Programs are capable of performing optimized search processes like **Informed** and **Uninformed** Searches



Production Systems are designed to mimic a human's decision making capability based on conditional triggers