

# Welcome



*Artificial Intelligence*  
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# Algorithm

*A star Search*

*Beam Search*

*AO\* Search*

*Beam Sear*

*BFS*

*DFS*

*Minimax*

*Alpha Bheta Pruning*

# Algorithm & Complexity



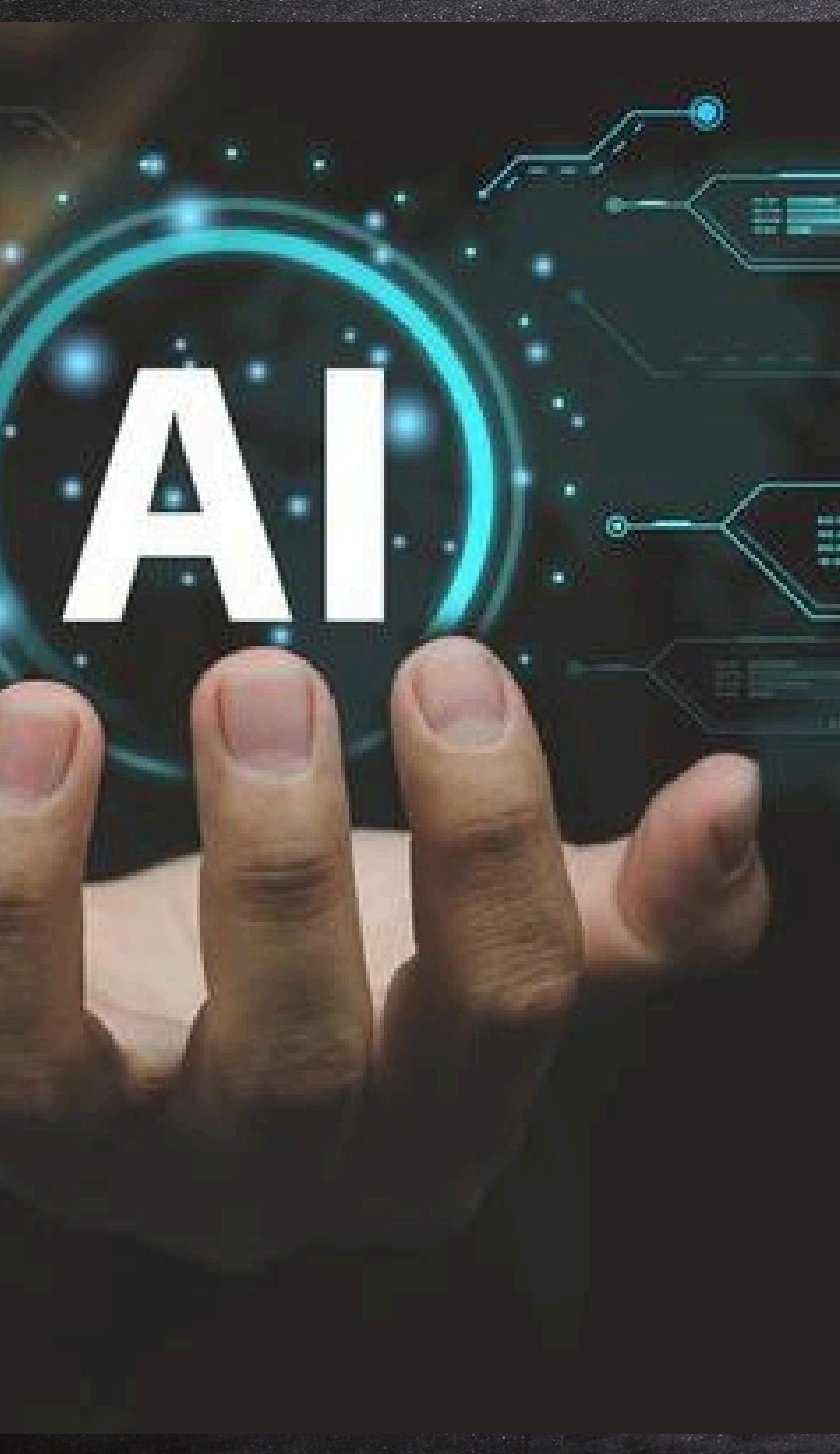
A* Star	$O(b^d)$
AO*	$O(b^m)$
Beam Search	$O(\beta^{D^*})$
BFS	$O(V + E)$
DFS	$O(n)$
Minimax	$O(b^m)$
Alpha Beta	$O(b^{d/2})$



## Constraint satisfaction:

A constraint satisfaction problem (CSP) is a type of problem in computer science, particularly in artificial intelligence, where the goal is to find a set of values for variables that satisfy a given set of constraints. Essentially, it's about finding a solution that meets specific requirements or limitations.





# Knowledge Representation and Reasoning

Knowledge Representation and Reasoning (KRR) is a core area of Artificial Intelligence focused on how to represent information in a way that computers can understand and use to solve problems and make decisions.

# Semantic Representation

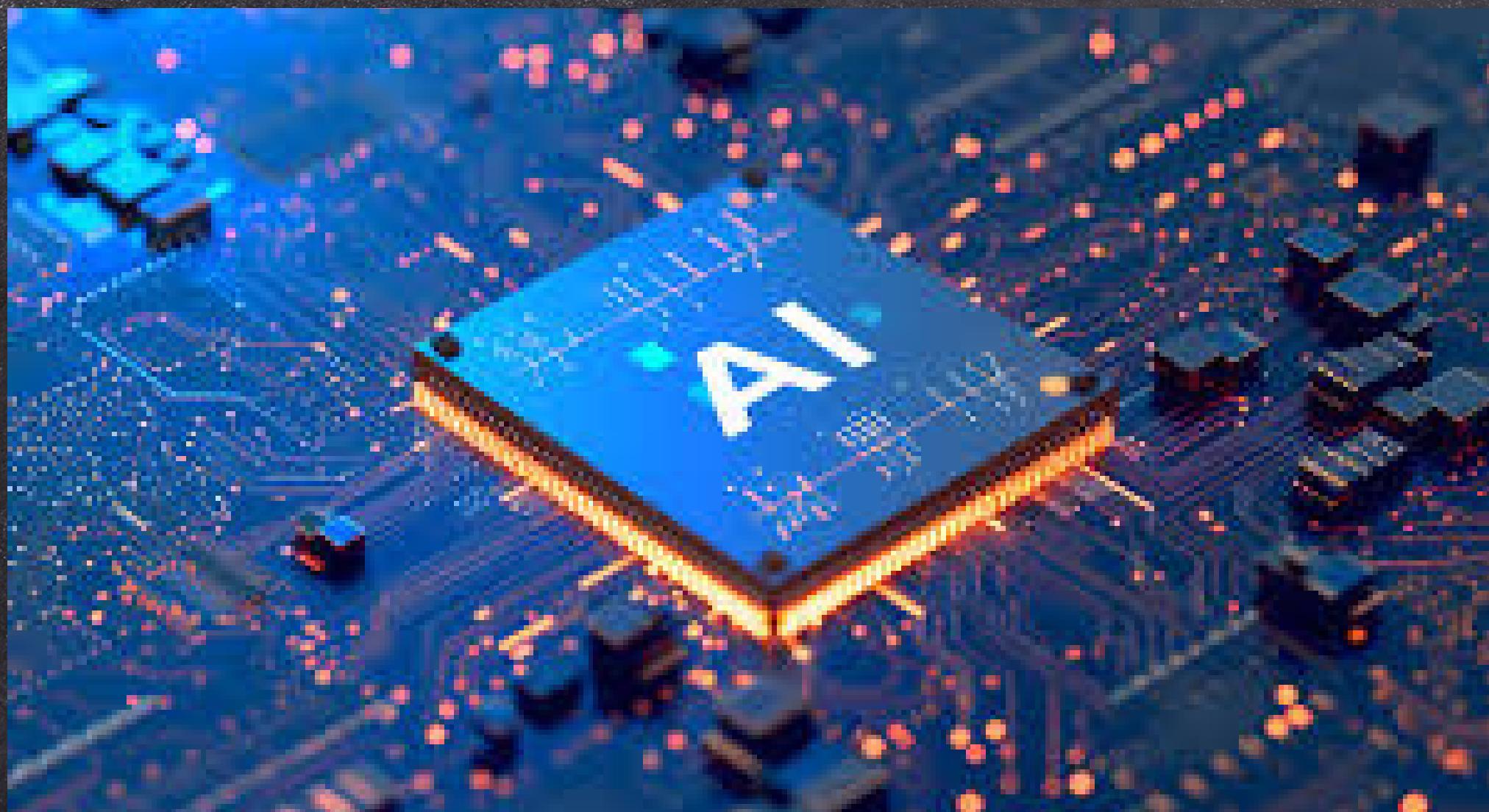
Semantic representation is a way to represent the meaning of something, whether it's a word, sentence, or a piece of information, in a way that captures its conceptual meaning and relationships to other concepts





# Reasoning Under Uncertainty

Reasoning under uncertainty refers to the process of making decisions and drawing conclusions when faced with incomplete, ambiguous, or probabilistic information





# Natural Language Processing (NLP)

Natural Language Processing (NLP) is a field of Artificial Intelligence that enables computers to understand, interpret, and generate human language.



# Language Modeling

Language modeling is a field in natural language processing (NLP) that focuses on creating models that can predict the next word or sequence of words in a given text.



# Information Retrieval (IR)

Information Retrieval (IR) is the science of finding relevant information within large collections of data, typically unstructured or semi-structured, like text documents.



THANK  
YOU