

365° WHEN, WHAT, WHY OF AI

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RULE-BASED AI			STATISTICAL AI					
WHEN <small>it became popular</small>	SYMBOLIC REASONING	ROBOTICS	MACHINE LEARNING	REINFORCEMENT LEARNING	NLP	COMPUTER VISION	DEEP LEARNING	SPEECH RECOGNITION
	1960-1970	1990-2000	2000-2010	2010-2020				
	Solve complex problems using logical rules 	Build machines to augment human capabilities 	Discover hidden patterns in data 	Maximize outcomes through trial and error learning 	Understand, interpret, generate human language "Hello World!"	Understand, interpret, generate visual data 	Complex pattern recognition through neural networks 	Transform spoken language to written text "Hello World!"
	<ul style="list-style-type: none"> First-order logic Resolution Refutation Rule-based Systems 	<ul style="list-style-type: none"> RRT SLAM 	<ul style="list-style-type: none"> Supervised ML Unsupervised ML Semi-supervised ML 	<ul style="list-style-type: none"> Q-Learning DQN Policy Gradients Actor-Critic Method 	<ul style="list-style-type: none"> n-gram models HMMs Word2Vec GloVe Transformer networks 	<ul style="list-style-type: none"> HOG SIFT Neural models 	<ul style="list-style-type: none"> CNNs RNNs GRU Transformer networks 	<ul style="list-style-type: none"> GNNS RNNs CTC
	EXPERT SYSTEMS AUTOMATED THEOREM PROVING 	INDUSTRIAL AUTOMATION MEDICAL ROBOTICS 	PREDICTIVE ANALYTICS RECOMMENDER SYSTEMS 	GAME AI RESOURCE MANAGEMENT 	SENTIMENT ANALYSIS CHATBOTS 	MEDICAL IMAGING SELF-DRIVING VEHICLES 	IMAGE AND SPEECH RECOGNITION ANOMALY DETECTION 	VOICE-DRIVEN VIRTUAL ASSISTANTS TRANSCRIPTION SERVICES
	John McCarthy (father of AI)	Joseph Engelberger (father of robotics)	Arthur Samuel (coined the term "machine learning")	Richard Sutton	Noam Chomsky	Takeo Kanade	Geoffrey Hinton (Godfather of deep learning)	James Baker
WHAT <small>does this AI do</small>								
WHICH <small>are the main models</small>	<ul style="list-style-type: none"> First-order logic Resolution Refutation Rule-based Systems 	<ul style="list-style-type: none"> RRT SLAM 	<ul style="list-style-type: none"> Supervised ML Unsupervised ML Semi-supervised ML 	<ul style="list-style-type: none"> Q-Learning DQN Policy Gradients Actor-Critic Method 	<ul style="list-style-type: none"> n-gram models HMMs Word2Vec GloVe Transformer networks 	<ul style="list-style-type: none"> HOG SIFT Neural models 	<ul style="list-style-type: none"> CNNs RNNs GRU Transformer networks 	<ul style="list-style-type: none"> GNNS RNNs CTC
WHY <small>what are some of the major applications</small>								
WHERE <small>in which products was the AI used</small>								
WHO <small>who are some of the pioneers of AI</small>								
	Marvin Minsky	Rodney Brooks	Tom Mitchell	Andrew Barto	Terry Winograd	David Marr	Yann LeCun	Alex Waibel