

SRM Institute of Science and Technology						
School of Computing						
18CSC305J - ARTIFICIAL INTELLIGENCE - ALL UNIT VIDEO LINKS						
S.NO	Unit	Topic	Video Link			
1	1	Introduction to AI-AI techniques, Problem solving with AI	https://youtu.be/kA6AmiQEXB4			
2		AI Models, Data acquisition and learning aspects in AI, Problem solving, Problem solving process, Formulating problems	https://youtu.be/0TOAeth8L , https://youtu.be/yEe-phW810			
3		Problem types and characteristics, Problem space and search.	https://youtu.be/pAFiz-LyH7U , https://youtu.be/SvzB9dQdE			
4		Intelligent agent, Rationality and Rational agent with performance measures, Flexibility and Intelligent agents, Task environment and its properties				
5		Types of agents, Other aspects of agents				
6		Constraint satisfaction problems(CSP), Crypto arithmetic puzzles				
7		CSP as a search problem-constraints and representation, CSP-Backtracking, Role of heuristic	https://youtu.be/UYTKxSiDOM			
8		CSP-Forward checking and constraint propagation, CSP-Intelligent backtracking				
1		Searching techniques- Uniformed search-General search Algorithm	https://youtu.be/PUn5DMg_32c , https://youtu.be/5Y1TzemoYss			
2		Uniformed search Methods-Breadth first search	https://youtu.be/a_08cX9d2e			
3	2	Uniformed search Methods-Depth first search	https://youtu.be/g5QF-C79p9M , https://youtu.be/Nap7v4KIAQ , https://youtu.be/aeKpUyQ2zw			
4		Uniformed search Methods-Depth limited search	https://youtu.be/RP8vQA1saa8			
5		Uniformed search Methods- Iterative Deepening search	https://youtu.be/d8L94AkpPw			
6		Bi-directional search	https://youtu.be/Tp6FmZS60c0			
7		Informed search- Generate and test, Best First search	https://www.youtube.com/watch?v=yVZ7tts34t4			
8		Informed search-A* Algorithm	https://youtu.be/mo0Tph4GQw			
9		AO* research	https://youtu.be/bCnEYn1d0Us			
10		Local search Algorithms-Hill Climbing, Simulated Annealing	https://youtu.be/jakAU72m8			
11		Local Beam Search	https://youtu.be/VdaxnwBvg			
12		Genetic Algorithms	https://youtu.be/B8FQvCnZY , https://youtu.be/svzUmTcW6w			
13	3	Adversarial search Methods-Game playing-Important concepts				
14		Game playing and knowledge structure	https://youtu.be/aPiqyG8us , https://youtu.be/0Kc3aQrDVE			
15		Game as search problem-Mini max approach				
16		Mini max Algorithm				
17		Alpha beta pruning	https://youtu.be/M7nDeHv4U			
18		Knowledge and reasoning-Approaches and issues of knowledge reasoning, Knowledge base agents-Logic Basics	https://drive.google.com/file/d/1dwhZbSpVunhFvixynAuvukvd2U7/view?usp=share_link , https://youtu.be/wBq2H0Q2Xo			
19		Logic-Propositional logic-syntax, semantics and inferences, Propositional logic- Reasoning patterns	https://youtu.be/vTis3CE0hCQ , https://youtu.be/vTis3CE0hCQ , https://youtu.be/1mcFIA6YhCa , https://youtu.be/K4e6mWixpY			
20		Predicate logic – Syntax and semantics, instance and is relationship, Unification and Resolution	https://drive.google.com/drive/folders/1yus3WZ7-4YPGMqgdy3M6mW8QLOqgmLb7uap?sharing			
21		Knowledge representation using rules, Knowledge representation using semantic nets	https://drive.google.com/drive/folders/147v8HQB4uWQd6fSiDnqXUMvRHxOxOr?usp=sharing			
22		Knowledge representation using frames, Inferences	https://drive.google.com/drive/folders/1JbFCcx05mMPP0XuaJyZM92HGJcN?usp=sharing			
23	4	Uncertain Knowledge and reasoning-Methods, Bayesian probability and belief network	https://youtu.be/JSRdX69w7Y			
24		Probabilistic reasoning, Probabilistic reasoning over time	https://drive.google.com/file/d/1Ib7H4K3dA_WWw26S0aaxYup180ymBy/view?usp=sharing			
25		Forward and backward reasoning, Other uncertain techniques-Data mining, Fuzzy logic, Dempster-shafer theory	https://drive.google.com/file/d/1uFv4v3YU8xZ_PdPhAwE3p2399tEH/view?usp=share_link , https://drive.google.com/file/d/1U2m8TaHnQ229RP11thk0ortEppCxCczM/view?usp=share_link			
26		Planning-Planning problems, Simple planning agent, Planning languages	https://drive.google.com/file/d/1b_SCH1d8nuFk5TY5pduwHDA4psG8eQ/view?usp=share_link			
27		Blocks world, Goal stack planning, Mean Ends Analysis	https://youtu.be/uRw5h4BUVVI , https://youtu.be/EHM_t070IE			
28		Non-linear Planning, Conditional planning, Reactive planning	https://youtu.be/1ZMoUiaA0			
29		Learning- Machine learning, Goals and Challenges of machine learning	https://youtu.be/F8MchddJsf4			
30		Learning concepts, models, Artificial neural network based learning- Back propagation	https://youtu.be/4NCcOxEd7BE			
31		Support vector machines, Reinforcement learning	https://www.youtube.com/watch?v=VUAanx2aVik , https://www.youtube.com/watch?v=n6GQcDMRz0			
32		Adaptive learning, Multi agent based learning	https://drive.google.com/file/d/1ekr-eeJqDkZvF9eH0l6ePQ3vYvGRd0/view?usp=share_link			
33	5	Ensemble learning, Learning for decision making, Distributed learning, Speedup learning	https://youtu.be/DsA9QAtq9gA			
34		Expert system-Architecture, Pros and Cons of expert system	https://drive.google.com/file/d/1JGxgU3Cag50hcnQkthgdyhGvGvCv9/view			
35		Expert system-Architecture, Pros and Cons of expert system	https://drive.google.com/file/d/1Neo2_6T14w00NM0uVfBy2ewhP18v9/view			
36		Rule based systems, Frame based expert system & Case study	https://drive.google.com/drive/folders/1a6N-VpFnDEVVvVqXsF7vQ8rsIqBa47B?usp=share_link			
37		Natural language processing-Levels of NLP, NLP Applications	https://youtu.be/hqTILWqfGQ			
38		Information retrieval, Information Extraction, Business intelligence and analytics	https://drive.google.com/drive/folders/1Z_iHwCnuxptelcxeBdR_CWc9KIZ19AeN?usp=sharing_eit_mkts=63d73e96			
39		Machine translation, NLP Applications	https://youtu.be/hqTILWqfGQ			
40		Advance topics in Artificial Intelligence- Cloud Computing and intelligent agent				
41		Deep learning Algorithms	https://drive.google.com/drive/folders/1sqUgcvhNahy5553F7aHhijCSUhy1X?usp=share_link			
42		Deep learning Algorithms	https://youtu.be/VYv9Dg_y8v8k			
43		Syntactic and Semantic Analysis, Sentiment Analysis	https://drive.google.com/file/d/1K8K3H8-4vziQOY85c60DScaWv57d8q/view?usp=share_link			
44		Planning and logic in intelligent agents				

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3		Uniformed search Methods-Depth first search	https://youtu.be/gSOFoC79qIM , https://youtu.be/NapYvAikIAQ
4		Uniformed search Methods-Depth limited search	https://youtu.be/RP8xQA1ew6
5		Uniformed search Methods- Iterative Deepening search	https://youtu.be/d8L94AokfPw
6		Bi-directional search	https://youtu.be/Tp6FmZS60cQ
7		Informed search- Generate and test, Best First search	https://smist-my.sharepoint.com/:v/a/personal/arunam_smist_edu_in/EV4czVUXaGVGpJsIrbZoXwBgmBmy_ICiCni1hJnExCvq?e=on64V
8		Informed search-A* Algorithm	https://youtu.be/kmo1TpHaGQw
9		AO* research	
		Local search Algorithms-Hill Climbing, Simulated Annealing	https://youtu.be/IjakAU72km8
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13		Game playing and knowledge structure	
14		Game as a search problem-Mini max approach	
15		Mini max Algorithm	https://youtu.be/a6PiqvG8ivs
16		Alpha beta pruning	
17		Game theory problems	
	Online Course - udemy	Genetic Algorithm Concepts and Working	https://www.udemy.com/course/genetic-algorithm-concepts-and-working/?referralCode=93C01E5C41F0BC275598