NPTEL Video Course - Computer Science and Engineering - NOC:Artificial Intelligence Search Methods For Proble

Subject Co-ordinator - Prof. Deepak Khemani

Co-ordinating Institute - IIT - Madras

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 30 - Genetic Algorithms and SAT
Lecture 31 - Genetic Algorithms for the TSP
Lecture 32 - Emergent Systems
Lecture 33 - Ant Colony Optimization
Lecture 34 - Finding Optimal Paths
Lecture 35 - Branch and Bound
Lecture 36 - Algorithm A*
Lecture 37 - A*
Lecture 38 - Is A* Admissible?
Lecture 39 - Admissibility of A*
Lecture 40 - Higher, Faster ...
Lecture 41 - B&B - A* - wA* - Best First
Lecture 42 - A*
Lecture 43 - The Monotone Condition
Lecture 44 - DNA Sequence Alignment
Lecture 45 - Divide and Conquer Frontier Search.
Lecture 46 - Smart Memory Graph Search
Lecture 47 - Variations on A*
Lecture 48 - Breadth First Heuristic Search
Lecture 49 - Beam Stack Search
Lecture 50 - Game Theory
Lecture 51 - Popular Recreational Games
Lecture 52 - Board Games and Game Trees
Lecture 53 - The Evaluation Function in Board Games
Lecture 54 - Algorithm Minimax and Alpha-Beta Pruning
Lecture 55 - A Cluster of Strategies
Lecture 56 - SSS*
Lecture 57 - SSS*
Lecture 58 - Automated Domain Independent Planning
Lecture 59 - The Blocks World Domain
Lecture 60 - State Space Planning
Lecture 61 - Goal Stack Planning (GSP)
Lecture 62 - GSP
Lecture 63 - Plan Space Planning (PSP)
Lecture 64 - PSP
Lecture 65 - Multi-Armed Robots
Lecture 66 - Means-Ends Analysis
Lecture 67 - The Planning Graph
Lecture 68 - Algorithm Graphplan

Lecture 69 - Problem Decomposition.
Lecture 70 - Algorithm AO*
Lecture 71 - AO*
Lecture 72 - Rule Based Expert Systems
Lecture 73 - The Inference Engine
Lecture 74 - The OPS5 Language
Lecture 75 - Conflict Resolution
Lecture 76 - Business Rule Management Systems
Lecture 77 - The Rete Net
Lecture 78 - Rete Algorithm
Lecture 79 - Rete Algorithm
Lecture 80 - Reasoning in Logic
Lecture 81 - Rules of Inference
Lecture 82 - Forward Reasoning
Lecture 83 - First Order Logic
Lecture 84 - Implicit Quantifier Notation
Lecture 85 - Backward Reasoning
Lecture 86 - Depth First Search on Goal Trees
Lecture 87 - Incompleteness...
Lecture 88 - Constraint Satisfaction Problems
Lecture 89 - Binary Constraint Networks
Lecture 90 - Interpreting Line Drawings
Lecture 91 - Model Based Diagnosis
Lecture 92 - Solving CSPs
Lecture 93 - Arc Consistency
Lecture 94 - Propagation = Reasoning
Lecture 95 - Lookahead Search